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Effects of Certified Nursing Assistant Program Commitment on Perceptions of Work Conditions in Austin Area Nursing Homes

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Effects of Certified Nursing Assistant Program Commitment on Perceptions of Work Conditions in Austin Area Nursing Homes

by

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Dedication

I would like to dedicate this dissertation to my Mom, Mary Kay Douglas, for her constant support while I was in school. From Bachelors to PhD, you have been there for me throughout, encouraging me, comforting me and loving me unconditionally.

I would also like to dedicate this dissertation to my Dad, King Henry Douglas, for his valuable gift of time. Dad, I could not have done this without your help. It is so nice to have a statistics expert in the family. You taught me more about statistics and research than I ever learned in school.

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Effects of Certified Nursing Assistant Program Commitment on Perceptions of Work Conditions in Austin Area Nursing Homes

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Previous research suggests certified nursing assistants may have more positive perceptions of their work conditions, may be less likely to leave their jobs and may also providing better quality care to residents when nursing homes provide interventions such as programs, awards and incentives to their employees. Research has not addressed CNA commitment to these programs and how commitment may interact with the relationship between program participation and work condition outcomes. When CNA's are not committed, any program would have a hard time succeeding.

Survey data was collected from 100 certified nursing assistants from seven nursing homes in the Austin area. The survey instrument consisted of four parts soliciting information about CNA demographics, program information and levels of commitment, perceptions of work conditions (empowerment, worker-supervisor relationship, job strain, intent to turnover and job satisfaction) and open-ended questions. Follow-up interviews were conducted with nursing home administrators.

The nursing homes were offering a variety of programs, however none were particularly innovative and it appeared that the programs were not successfully

integrating the CNA participants into the facility culture. There was no organized effort by nursing home management to develop or improve programs, increase participation or increase commitment among program participants. While only 30 out of 100 CNAs were participating in programs, nursing home effort to increase participation and actual CNA participation were positively correlated; CNAs participating in programs were moderately committed and there was a positive relationship between nursing home effort to increase program commitment and actual CNA commitment. These results indicate more effort is needed to develop and implement programs and increase program participation and commitment. In the absence of programs, certified nursing assistants in the sample still had relatively positive perceptions of their work conditions. There was however, quite a bit of variation within the sample leading me to conclude that more and better programs, along with increased effort to improve participation and develop program commitment, would have a positive impact on perceptions of work conditions.

I was unable to determine the role of program commitment in the relationship between program participation and perceived work conditions. Previous research has shown organizational commitment contributes to an organizations' success. The same should hold true for a specific programs' success.

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Chapter 1

This introductory chapter includes a description of the problem that led me to conduct my dissertation research in this area and a brief description of my study along with results. My research questions and hypotheses are outlined in this chapter and the conceptual framework for my study is laid out.

1.1 INTRODUCTION

The U.S. is facing a nursing workforce shortage and a concomitant increase in demand for healthcare workers. Two factors contributing to the nursing workforce shortage are an increase in demand for health care services and high levels of turnover among the nursing workforce. Recent research has concluded that the culture of an organization and its' leadership have a large impact on workforce outcomes. Positive organizational cultures and leadership behaviors appear to result in a more committed, qualified and longer-staying workforce. Five significant organizational practices have been found to contribute to lower levels of turnover, 1) high quality leadership and management; 2) a practice of valuing and respecting nursing staff, especially direct caregivers; 3) positive human resource practices, both economic and non-economic; 4) a set of thoughtful work organization and care practices that relieve job stress; and 5) an adequate staff-to-resident ratio allowing additional time for providing high quality care (Eaton 2003). Some of these organizational practices were studied in this dissertation.

Previous research suggests certified nursing assistants (CNAs), those providing most of the hands-on care to residents in long-term care facilities, may have more positive perceptions of their work conditions, may be less likely to leave their jobs and may also provide better quality care to residents when nursing homes provide programs, awards and incentives to their employees (Stone et al. 2002; Paraprofessional Healthcare Institute 2003; Cornell Gerontology Research Institute 2003; Harris-Kojetin, Lipson,

Fielding, Kiefer and Stone 2004)). Research has not addressed CNA commitment to these programs and how commitment may interact with the relationship between program participation and work condition outcomes. When CNA's are not committed, any program would have a hard time succeeding. In this study, a program is any type of intervention implemented within a nursing facility, that targets CNAs and is designed to improve perceptions of work conditions, decrease turnover or job stress or improve levels of job satisfaction. Several types of programs, or interventions, have been identified in this study: formal programs (i.e. peer-mentor programs or career ladders), award programs (i.e. awards for perfect attendance or employee-of-the-month), incentive programs (i.e. free meals, holiday parties or gifts for good performance), training programs (i.e. in-service training as required by federal legislation), providing feedback (i.e. positive feedback from supervisors, co-workers or residents given either orally or as a note or letter), and policy initiatives (i.e. including CNAs in the development of the organization's vision and mission, or providing vacation and sick leave).

This study focuses on certified nursing assistants (CNAs), working in full-care, long-term care facilities. For the purposes of this study, a CNA is a person who has completed 75 hours of a state approved training program that allows them to work in a long-term care facility. Aides who complete the program are referred to as certified nursing assistants and are placed on the states nurse aide registry. CNAs perform most of the hands-on care provided in nursing homes. CNAs assist residents with activities of daily living such as feeding, bathing, dressing, grooming, and are responsible for moving patients and changing linens.

Certified nursing assistants are one segment of the direct care workforce. The direct care workforce includes CNAs, home health aides, home care aides, personal assistants, personal care attendants and direct support professional. Direct-care workers are employed in many settings, including nursing homes, their clients' homes, adult day

centers, assisted living facilities and other community settings. In this study, the reader will sometimes see CNAs referred to as direct care workers. The review of the literature will include references to direct care workers because some of the studies reviewed include all direct care workers, not just the CNA population in the study.

A nursing home or long-term care (LTC) facility houses individuals who require constant nursing care and have significant deficiencies with activities of daily living. A long-term care (LTC) facility is one where the residents are expected to remain in the facility for longer periods of time, although some residents enter the facility under Medicare and receive physical therapy for a limited period of time before returning home. In general, nursing homes residents have physical or mental limitations that keep them from living independently.

This is an applied dissertation study. The purpose of this study was to determine 1) what kinds of programs, awards, or incentives are being offered in Austin area nursing homes, 2) what nursing home administrators are doing to increase CNA participation and commitment to programs, 3) are CNAs committed to these programs, 4) what are CNA perceptions of their working conditions, and 5) is CNA program participation and commitment related to CNA perceptions of their work conditions. I am trying to determine what individual nursing homes are doing to improve work conditions for their employees. There are a number of evidence-based best practices identified in the literature. However, most of these studies have been conducted with nursing homes that are connected with some kind of research institution or organization. What is of interest in this study is, what are individual nursing homes doing without the benefit of these outside organizations? Are individual nursing homes aware of the resources available to them? What can we do as researchers, to ensure that knowledge about best practices trickles down to those that would benefit most from the information. It is not only our responsibility to conduct research and provide our findings to the academic community.

It is our responsibility to assist nursing homes as they try to incorporate the results of our studies into their everyday operations.

Survey data was collected from 100 certified nursing assistants from seven nursing homes in the Austin area. The survey instrument consisted of four parts soliciting information about CNA demographics, program information and levels of commitment, perceptions of work conditions (empowerment, worker-supervisor relationship, job strain, intent to turnover and job satisfaction) and open-ended questions. Follow-up interviews were conducted with nursing home administrators to gain additional insight into

- How nursing homes operate.
- How they develop, prepare and implement programs.
- What kinds of barriers administrators face when developing and implementing programs and what barriers CNAs face when trying to participate in programs.
- The role of commitment in program success.
- Administrators' thoughts on the solution to improving CNA job satisfaction.

The nursing homes were offering a variety of programs, none of which were particularly innovative. In order for a program to be successful, the CNA must "buy in" or commit to the goals of the program. Most programs are designed to integrate the CNA into the organization to create company loyalty as well as to improve retention and job satisfaction. In this case, none of the programs were being implemented to their full potential, leading to poor CNA participation and varied levels of commitment from CNAs. This is evidence that the CNAs participating in these programs were not feeling integrated into the facility. There was no organized effort by nursing home management

to develop or improve programs, increase participation or increase commitment among program participants.

While only 30 out of 100 CNAs were participating in programs, nursing home effort to increase participation and actual CNA participation were positively correlated; CNAs participating in programs were moderately committed and there was a positive relationship between nursing home effort to increase program commitment and actual CNA commitment. These results indicate more effort is needed to develop and implement programs and increase program participation and commitment. In the absence of programs, certified nursing assistants in the sample still had relatively positive perceptions of their work conditions. There was however, quite a bit of variation within the sample leading me to conclude that more and better programs, along with increased effort to improve participation and develop program commitment, would have a positive impact on perceptions of work conditions.

I was unable to determine the role of program commitment in the relationship between program participation and perceived work conditions. Previous research has shown organizational commitment contributes to an organizations' success. The same should hold true for a specific programs' success.

1.2 RESEARCH QUESTIONS AND HYPOTHESES

I. What kinds of programs are nursing homes offering their nursing assistants to improve work environment? What are nursing homes doing to increase CNA participation in these programs?

H1: There will be a positive relationship between perceived level of nursing home effort to increase participation and actual CNA participation.

II. What are nursing homes doing to increase certified nursing assistant commitment in these programs? Are CNAs committed?

H2: There will be a positive relationship between perceived level of nursing home effort to increase commitment and actual CNA commitment.

III. What are certified nursing assistant perceptions of their work conditions?

IV. What is the role of commitment in the relationship between program participation and perceived work conditions?

H3: Participants will have more positive perceptions of their work conditions than non-participants.

H4: There will be a positive relationship between commitment and CNA perceptions of their work conditions.

1.3 CONCEPTUAL FRAMEWORK

Expectancy Theory

V.H. Vroom (1964) and Porter and Lawler (1968) first theorized and then Pinder (1984) further elaborated that individuals choose particular courses of action, or decide to expend a certain amount of effort, based on the outcomes they expect to attain and the degree to which they value the outcome, based on their perceptions, attitudes and beliefs. Expectancy theory is a process theory of motivation because it focuses on individuals' perceptions of the conditions surrounding them and the following interactions that occur as a result of personal expectations. Expectancy theory mainly relies on extrinsic motivators that explain certain behaviors in the workplace (Leonard, Beauvais and Scholl 1999). The theory is made up of three components,

- Expectancy – "The personal expenditure of effort will result in an acceptable level of performance."
- Instrumentality – "The performance level achieved will result in a specific outcome for the person."
- Valence – "The outcome attained is personally valued" (Isaac, Zerbe and Pitt 2001).

Expectancy suggests that an employees assigned duties must include reasonably challenging tasks that are in-line with the employees self-confidence, abilities, education, training, skills and experience. If the work is not challenging enough then the employee will become bored, frustrated and performance will suffer. If the task is too challenging then the employee motivation levels will decrease and performance will also decline. Supervisors must recognize that employees differ in their levels of self-confidence, self-esteem and ability and keep this in mind when assigning responsibilities (Isaac, Zerbe and Pitt 2001). It is equally important that supervisors express encouragement and appreciation as employees attempt to achieve a desired level of performance.

Recognition, in this case, is key. The supervisor must also ensure that expectations for performance are clear and there is mutual understanding and agreement between employee and supervisor. Finally, the supervisor must determine whether the expenditure of effort on the part of the employee will lead to increased level of job satisfaction (Isaac, Zerbe and Pitt 2001). According to Jill Haselman of Benchmark Assisted Living, who spoke at the 2006 Gerontological Society of America Annual Conference on leadership effectiveness, "leaders must discover what people need."

Instrumentality suggests that the perceived performance levels are related to expected rewards. The employee must trust that the supervisor will be able to produce the rewards they have promised. Supervisors must ensure that employees are treated fairly in a predictable manner, realizing that all employees will not receive the same treatment depending upon their needs. Treatment must be perceived as fair by employees but also by co-workers. A supervisor must also provide honest feedback that is clear and does not lend itself to misinterpretation (Isaac, Zerbe and Pitt 2001).

Valence suggests that employees must value the rewards they receive. The attractiveness of certain outcomes will differ among individuals and a supervisor must be in tune with what their employees need and value. For some employees, just saying "thank you" is a sufficient reward, while other employees will respond more strongly to praise or tokens of esteem and recognition. Of particular importance is an alignment between the personal goals of the employee and those of the organization. Supervisor must work diligently to ensure that the vision and goals or the organization are shared between supervisors and employees (Isaac, Zerbe and Pitt 2001).

An important idea of Expectancy Theory is that all supervisors and employees should choose to be leaders within their organization. When managers, supervisors and employees work together to move towards the shared vision there can be enormous rewards for all involved (Isaac, Zerbe and Pitt 2001).

This theory is particularly salient to this dissertation topic because it deals with what motivates individuals. It stresses the importance of a shared vision among supervisors and employees, effective communication, active listening, and a clear relationship between effort and performance and performance and outcomes. If these principles were used when developing and implementing programs within nursing facilities, then the programs would be more likely to resonate with CNAs, participation and commitment to program goals would increase and perceptions of work conditions would most certainly improve.

Alienation

Mirowsky and Ross (2003) incorporated Seeman's (1959, 1983) classic definition of alienation into five issues: control, commitment, support, meaning and normality. Several concepts overlap when discussing control: locus of control, self-efficacy, learned helplessness and personal control. Locus of control is 1) the belief that outcomes of situations are determined externally, by powers other than our own such as powerful others, fate, chance or luck (external locus of control) or 2) the belief that outcomes of situations are determined by our own choices and actions (internal locus of control). Self-efficacy is the belief in ones own power to achieve a certain outcome, such as staying healthy, finishing school or getting a job. "Self-efficacy is an individual's belief that they can (or cannot) perform a specific action" (Mirowsky and Ross 2003). Learned helplessness is the result of exposure to "inescapable, uncontrollable negative stimuli." The behavior associated with learned helplessness is a low rate of voluntary response to stimuli and difficulty learning successful behaviors. Learned helplessness refers to an individual's behavior in a certain situation, not to any cognitive attribution of control to forces external to oneself, and not to any internal feelings of depression. Personal control is an expectation, both learned and generalized, that outcomes are contingent on an individual's choices and actions. Individuals with high levels of personal control believe

that they can effectively influence their environment; an understood link between actions and outcomes (Mirowsky and Ross 2003).

There are several conditions that are likely to produce a belief in external control: objective powerlessness, structural inconsistency, alienated labor, dependency and role overload (Mirowsky and Ross 2003). All of these conditions are usually present in a nursing home environment.

Objective powerlessness is the inability to achieve a goal or the inability to achieve a goal when in opposition to others (Mirowsky and Ross 2003). For example, certified nursing assistants are often unable to spend quality time with the residents they serve. CNAs often choose this type of work because of their desire to care for older adults. Because of this, their goals may be to improve the lives of the people they care for and they may not be able to do this because of understaffing or organizational policies that limit a CNAs ability to spend time at the residents' bedside.

Structural inconsistency is when society defines certain goals or outcomes as desirable but does not give the individual the tools to achieve the desired goals or outcomes through legitimate means (Mirowsky and Ross 2003). The vision and mission of nursing facilities often includes providing high quality care to residents and preserving their dignity and quality of life. Nursing homes are often understaffed and CNAs tend to come to the facilities unprepared to deal with the stressful reality of the work. When there are not enough employees to do a job, and those that are available or under a great deal of stress, quality of care often declines.

Alienated labor is a condition where an employee does not get to decide how to do their job, when they are going to do their job and they are not the owners to the product which they produce (Mirowsky and Ross 2003). In this case, CNAs often have very little control over how they do their jobs. They are not allowed to set their own schedules or choose their own vacation days. They are also not included when

supervisors and nursing staff meet to develop care plans for residents, even though the CNA is the one who provides most of the hands-on care to the resident and the one that is most likely to know about changes in the health of the resident. This leads CNAs to become unempowered or to feel as though they have very little control over the situation in which they find themselves.

Dependency is when "one partner in an exchange has fewer alternative sources of sustenance and gratification than the other" (Mirowsky and Ross 2003). This concept is not seen so clearly in long-term care because CNAs can choose to leave a facility for another nursing home given the current staffing shortages. However, CNAs are likely to be uninsured and have few benefits, where as administrators and directors of nursing will most likely have health insurance and benefits. Also, CNAs often perform their duties without respect from their supervisors while CNAs, on the other hand, are expected to behave subserviently and perform their duties without question.

Role overload is a concept seen quite often in long-term care settings. It is a situation in which legitimate expectations of supervisors of co-workers create demands that over whelm individuals' abilities to meet those expectations (Mirowsky and Ross 2003). For example, because of staffing shortages in long-term care, there is often only one CNA for every twenty residents. The CNA has to get every resident they are responsible for dressed, to the bathroom, to breakfast/lunch/dinner, and bathed. Most often, the time required to perform the duties is more than the number of hours the CNA is working on any particular day. This means that the CNA will either have to work additional hours, for which they are most often not paid, or the work will have to wait for the next CNA coming in, and therefore creating a heavier workload for the that CNA.

Organizational Commitment

Organizational commitment may be defined as "the relative strength of an individual's identification with and involvement in a particular organization." It can be

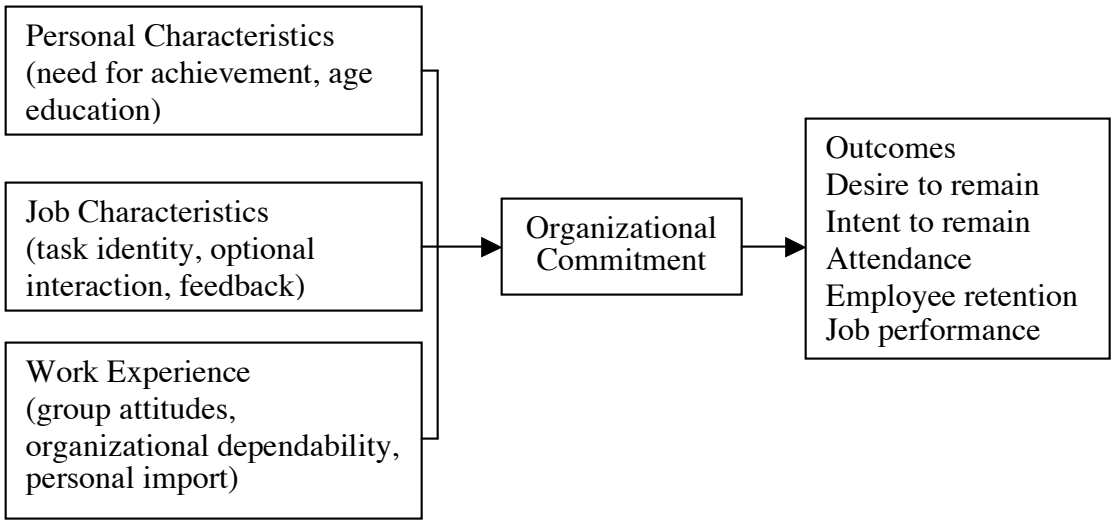
characterized by at least three factors: (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to exert considerable effort on behalf of the organization; and (3) a strong desire to maintain membership in the organization." (Steers 1977)

Some research has shown committed employees may perform better than less committed ones and that organizational commitment may represent one useful indicator of the effectiveness of an organization. Some outcomes of organizational commitment identified by Steers (1977) are employee desire to remain, intent to remain, attendance, employee retention and improved job performance. Organizational commitment has also been linked to lower levels of turnover.

Steers identified three main categories within the antecedents of commitment (personal characteristics, job characteristics and work experience.) Organizations that establish high levels of commitment among their employees often have positive organizational cultures where employees are respected and valued. Employees are given opportunities for achievement, variety, feedback and autonomy. Steers' model of organizational commitment is illustrated in Figure 1.

Bruce Buchanan (1974) suggested commitment is influenced by the quality of employee experiences within an organization. A positive organizational culture could contribute to levels of organizational commitment. Some research has shown innovative programs provided to CNAs working in long-term care facilities will improve CNAs' perceptions of organizational culture. However, the quantity and quality of programs is irrelevant if CNAs do not know about them, chose not to participate in them or do not care about the outcomes or goals of the programs.

Figure 1: Model of organizational commitment (Steers 1977)



Innovative Programs

Innovative programming has been linked to lower levels of turnover, higher levels of job satisfaction and even better employee-performance. Some examples of innovative programs discussed in the review of the literature are peer mentor programs, career ladders, self-managed work teams, retention specialist programs and other culture change initiatives. Better jobs for CNAs leads to better quality care for residents. (This will be discussed further in the review of the literature.)

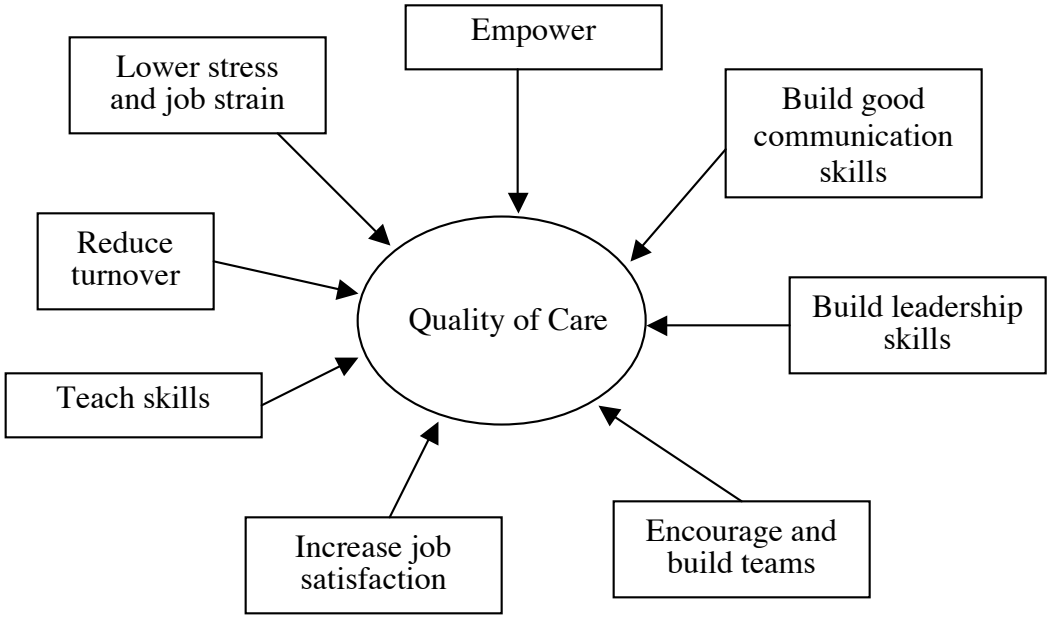
Program Commitment

If organizational commitment contributes to an organizations' success or effectiveness then I postulate that commitment to a program contributes to a programs' success or effectiveness as well. This kind of programming is meant to retain CNA staff, improve work conditions, teach new skills and improve CNA performance. These are also factors that may lead organizational commitment.

The literature suggests that innovative programs contribute to lower levels of turnover, better CNA job quality and better quality of resident care. The outcomes of successful programs are illustrated in Figure 2. Previous research has shown that these factors contribute to better quality of care.

Based on the results of this study, nursing home administrators and management staff can develop program commitment among CNAs by establishing effective communication skills, providing positive leadership and developing programs that are in tune with employees needs and wants. They also need to show employees they are respected and valued members of the organization. CNAs who feel like a vital part of the organization would be more likely to participate in programs. Using CNAs who are already participating in programs as "champions" to advertise and promote the programs would be a good way to increase CNA participation in and commitment to programs.

Figure 2: Program outcomes may improve resident outcomes



These three concepts, motivation (Expectancy Theory), alienation and commitment are all related and are important concepts when studying programs or interventions designed to improve CNA perceptions of work conditions. CNAs need to be sufficiently challenged and encouraged and appreciated by their supervisors. An effective nursing home would operate in a culture of clear communication, mutual agreement on expectations and outcomes and mutual trust and respect. Employers should be in tune with what employees need and want and supervisors should determine what CNAs value, given that values are different for every individual. CNAs should be given more control over their own environment so that they are able to achieve their desired goals. There should be a sense of consistency and trust throughout the organization and CNAs should be provided the tools they need to perform their jobs well. In order to increase CNAs feelings of control, nursing facilities should include CNAs in organizational planning and development and should give them more control over how they do their jobs. Providing better wages and benefits may also increase CNA feelings of control although that topic is not addressed in this dissertation given the current trend of reducing federal funding to nursing homes. In the absence of increased wages and benefits, nursing facilities need to provide support to their employees so that are better able to cope with the stresses of direct care work. If all of the above goals are attained then nursing facilities will find that their employees are better committed to the organization. They will share the goals and values of the organization, show willingness to work hard for the organization, and show a strong desire to maintain their relationship with the facility.

To give a picture of the above concepts are work, I have provided a description of the working environment at Americorp. Americorp is a network of local, state and national service programs that brings together more than 70,000 American each year so

that they may provide intensive service to meet education, health, public safety and environmental needs of the United States. I worked for Americorps from 1998-2000. Working for Americorps is considered volunteer work and is a national service. Thus, Americorps workers receive minimal pay and no benefits. However, those working for Americorps show great pride and commitment to their work. Americorps provides a wonderful working environment. Employees are given control over their own schedules and how they perform their duties. The organization of made up of teams lead by team leaders who stress group work over hierarchy and bureaucracy. In addition to their work, Americorps provides its volunteers with valuable training opportunities and also provides an educational award at the end of the year to assist those who wish to continue their educations. The teams meet regularly to learn about diversity, AIDS awareness, conflict resolution, or how to write a resume, prepare for an interview or lead a meeting. Americorps volunteers receive regular and meaningful recognition from supervisors, there is clear communication between volunteers and team-leads or supervisors, and mutually agreed upon expectations for volunteers that are developed at the beginning of service. Americorps provides training opportunities that are relevant to, and valued by, its volunteers. Working as a volunteer for Americorps often puts individuals in situations fraught with stress. Americorps team-leads and supervisors are trained to provide support volunteers need to continue in this type of environment and the teams often meet to discuss problems they encounter during their assignments.

It is because of this experience that I am interested in what interventions can be used to create this same culture of respect, pride and commitment that I experienced during my time with Americorps. Many individuals are in jobs where they are undervalued, underpaid and overworked. The long-term care industry is by no means the only place where this type of alienation occurs. However, because of the important nature of CNA work, I feel strongly about improving work conditions for CNAs.

This chapter included an introduction to the problem, a discussion of some of the relevant literature, a description of the study and results and a list of research questions and hypotheses. The conceptual framework for this study was also laid out. The next chapter will provide a more detailed description of the problem and provide additional information on the background and significance of the study. The aging of the baby boomer generation, long-term care users, and the certified nursing assistant population will also be discussed.

Chapter 2: Background and Significance

This chapter provides the background for, and significance of, this study by describing the problem facing the health care industry in the U.S. There is a gap between the supply of and demand for direct care workers, including registered nurses, licensed vocational nurses and certified nursing assistants (CNAs). This gap continues to grow because of the aging of the U.S. population, and can be attributed in part to the large cohort of baby boomers reaching old age at the same time, and the difficulty in recruiting and retaining a qualified direct care workforce. The problem facing the U.S. and the baby boomer, long-term care and CNA populations (a subset of the direct care workforce) are described in this chapter.

2.1 THE PROBLEM

The U.S. is facing a nursing workforce shortage and a concomitant increase in demand for healthcare workers. Several factors are contributing to the increased demand for healthcare workers:

- The difficulty in recruiting and retaining a highly qualified direct care workforce,
- A lack of respect for frontline workers, leading to a high turnover rate among certified nursing assistants (CNAs),
- A lack of opportunity for career advancement,
- A cultural gap between co-workers and between CNAs and residents of long-term care facilities, and
- An organizational structure that does not promote positive working conditions (Eaton 2003).

Critics who have studied the frontline workforce in the past have found the frontline workers to have a poor "work ethic", low levels of education and training and low reliability. More recent research has concluded that the culture of the organization

and its leadership, have a large impact on workforce outcomes. The problem is complex--high levels of turnover are influenced by

- Poor management practices,
- Depressing and unsafe working conditions,
- Low wages,
- Few benefits,
- Poor teamwork, and
- Little peer support for learning (Eaton 2003).

A majority of the CNAs interviewed by Eaton (2003) claimed that their co-workers do not treat them with dignity and respect. Lack of dignity and respect seemed to bother them more than low wages and lack of benefits. Most CNAs do not have the opportunity to continue their education beyond the CNA level to the level of licensed vocational nurse (requiring one year of full-time schooling or two years part-time) or registered nurse (most of whom are baccalaureate prepared with special training in addition) (Eaton 2003).

Research has shown that wages and benefits are significant predictors of CNA job satisfaction and intent to quit and CNA responses to open-ended questions in this study support the finding that wage is important to CNA job satisfaction. However, it is unlikely that wages and benefits will improve greatly in the near future given the recent and on-going reductions in Medicaid spending. Because of these limitations, other studies have focused on interventions that may improve recruitment and retention of CNAs. In this study I have focused on what nursing homes are doing to improve work conditions for their CNAs in the absence of wage and benefit increases.

There exists a cultural gap between CNAs and their supervisors (mostly licensed vocational nurses or registered nurses) and residents. According to the U.S. Bureau of Labor Statistics (BLS), many CNAs are immigrants, although 56% are now white, non-

Hispanic Americans. The majority of registered nurses are white women (89%) and nursing home residents are mostly poor, white, old women. The cultural divide between CNAs and their supervisors or residents makes communication and the development of positive working relationships more difficult (Eaton 2003).

Organizational cultures and leadership styles can also negatively affect CNA retention. Positive organizational cultures and leadership behaviors appear to result in a more committed, qualified and longer-staying workforce (Eaton 2003).

Eaton (2003) identified five significant organizational practices that lead to lower levels of turnover, 1) high quality leadership and management; 2) a practice of valuing and respecting nursing staff, especially direct caregivers; 3) positive human resource practices, both economic and non-economic; 4) a set of thoughtful work organization and care practices that relieve job stress; and 5) an adequate staff-to-resident ratio allowing additional time for providing high quality care (Eaton 2003). Some of these organizational practices were studied in this dissertation.

A second factor contributing to the nursing workforce shortage is the increase in demand for health care services. With the aging of the baby boomers (those Americans born after the end of the Second World War from 1946 to 1964), the U.S. will face an increased need for healthcare services and may not have the workforce to provide the high quality of care that will be needed. The U.S. Bureau of Labor Statistics estimated that, between the years 2000 and 2012, direct-care worker employment will grow to more than double the projected growth in overall employment nationally (33.8% and 14.8% respectively) (Paraprofessional Healthcare Institute 2004). The BLS projected that between these years, the U.S. will need 1.2 million direct care workers (nurse aides, home health aides, and persons in similar occupations) to cover the growth in available long-term care positions from both increasing older populations in need of services and to replace departing workers (Health Resources & Services Administration 2004). In the

U.S., the responsibility of caring for our aging populations is shifting from hospital care to non-hospital settings such as nursing home care. Because of the growth of assisted living facilities and other alternatives to nursing home care, nursing homes in the future will be more likely to be responsible for the care of the oldest-old and the very ill who will need complex and intensive care (Beck, Ortigara, Mercer and Shue 1999).

An increased need for long-term care services will lead to increased need for trained and experienced individuals able to provide this care. But low job satisfaction, low pay, lack of career advancement and poor worker-supervisor relationships lead to high turnover among trained and experienced workers. Because of this, the supply of workers, relative to demand for services, is beginning to decline.

National studies have cited annual turnover rates from 45% to 105% (Health Resources & Services Administration 2004). Vacancy rates continue to be high among direct-care worker occupations. In 2003, a study done by the Paraprofessional Healthcare Institute and the North Carolina Department of Health and Human Services' Office of Long-Term Care showed that over three-quarters of the states that responded to their survey considered the direct-care worker shortage to be a serious problem. In 2003, states had difficulty implementing direct-care initiatives because of reduced funding, terminations, and delays (Paraprofessional Healthcare Institute 2004). Data were collected again in 2005. Analysis of those data showed that, of the states reporting, similar to the findings from 2003, 29 (76.3%) considered direct-care worker vacancies to be a serious issue. Twenty states undertook some kind of initiative in 2004. The initiatives included direct care worker career advancement, task force or commission formation, public awareness campaigns, research studies, quality improvement initiatives, wage benefit enhancements and other types of initiatives.

Texas reported that it collects turnover data from nursing facilities on nurse aides, registered nurses, directors of nursing and licensed vocational nurses but no statewide

analyses of these data are available. Texas reported having very serious workforce issues, but did not undertake any initiatives in 2004. The state reported having no current (or future) strategies to address lack of affordable health insurance for health care workers. According to the survey, the median hourly wage for nurse aides, orderlies and attendants in Texas is $8.28 (The National Clearinghouse on the Direct Care Workforce and The Direct Care Workers Association of North Carolina 2005).

CNA's may influence the quality of life of residents, but there are barriers to the quality of care they can provide (Mickus et al. 2004). These barriers include low wages, minimal long-term benefits, insufficient training and inadequate recognition and support for their physically and emotionally demanding work (Beck et al. 1999; National Conference of State Legislatures 2004). Educated and skilled employees are limited in what they can do when the workplace design and organizational culture does not support their needs (Nakhnikian and Kahn 2004).

In the following two sections I will discuss, in more detail, the problems associated with an increasingly older population and certified nursing assistant work.

2.2 THE AGING OF THE POPULATION

The Baby Boomers

The first of the baby boomers turned sixty this year (2006), and will turn 65 in 2011. Between 2011 and 2050 the youngest of the baby boom cohort will be turning 65 and the oldest will have reached their mid- to late-80s (Center for Health Workforce Studies 2005). Between 2002 and 2020, the percentage of adults age 85 and older, living in Texas, is expected to increase from 1.2% to 1.6%, representing an 82% increase in the population number. Nationwide, there is expected to be an increase in the population of adults age 85 and older from 1.6% to 2.0%, representing a 60% increase in the population (Gibson, Gregory, Houser and Fox-Grage 2004). The early 21st century is a critical time

for the U.S. to start preparing for the challenge of meeting the health care needs of this older population.

The baby boomer population may have different needs from the older adults of today. The demographic characteristics of the baby boomer population are illustrated in Table 1. This cohort will be more racially and ethnically diverse. They will have more education than in the past and are more likely to be informed about health care practices and services. They are less likely to be poor and more likely to have high incomes and may have more discretionary money to spend on health services that will improve their quality of life. They will be in better overall health because of better access to health care throughout their lives. However, baby boomers will also have smaller support networks than in the past. Baby boomers were more likely to have few or no children (12% of women in this cohort are currently childless). They are also more likely to be divorced and more likely to live alone as they age (Center for Health Workforce Studies 2005). Even though the above makes it seem as though the need for long-term care is going to decline because of demographic changes in older populations, the large numbers of individuals reaching old age more-or-less simultaneously because of the baby boom generation will overwhelm any other demographic change (Alecxih 2001).

Table 1: Demographic Profile of the Baby Boom Population

Demographic Profile of the Baby Boom Population
More education than in the past *(15% college graduates and 67% high school graduates)*
More racially and ethnically diverse
More informed about health care services
Less likely to be poor *(10.5%)* and have higher incomes *(27.5%)*
Have fewer children *(more than 12% of women in this cohort are childless)*
More likely to be divorced *(lifetime divorce rates for this cohort are projected to be 53%)*
More likely to live alone as they age

Long-Term Care Residents

According to the American Association of Retired Persons (AARP), as of 1999, there were approximately 1.6 million nursing home residents in the U.S and there were approximately 18,000 nursing homes to house them. At any given time about 4% of older adults (age 65 and older) live in a nursing home. Approximately 46% of those who turn 65 in the next twenty years are expected to spend at least some time in a nursing home (Center for Health Workforce Studies 2005). In 2003, Texas had 87,470 nursing facility residents, ranking third in the nation (Gibson et al 2004). The demographic characteristics of the population using long-term care services must be described in order to fully understand the magnitude of the frontline workforce shortage. These characteristics are illustrated in Table 2. Nursing home residents are likely to be female (72%), white (85%), widowed (57%) and older than age 85 (46%)(Center for Health Workforce Studies 2005).

Table 2: Demographics of Long-Term Care Users

Demographics of Long-Term Care Users	
Race	White (85%)
Sex	Female (72%)
Marital Status	Widowed (57%)
Age	Older than age 85 (46%)

This population has a wide range of service needs but the most common need is assistance with activities of daily living (ADL) such as toileting, bathing and eating (Health Resources & Services Administration 2004). According to the AARP, nursing home residents need assistance with 3.8 ADLs on average, compared with 2.3 ADLs among assisted-living residents and 1.6 ADLs among recipients of home-health care (Center for Health Workforce Studies 2005).

2.3 THE CERTIFIED NURSING ASSISTANT POPULATION

Certified nursing assistants provide basic assistance with activities of daily living (ADLs) such as feeding, bathing, dressing, grooming, and are responsible for moving patients and changing linens. In 2003, The United States Bureau of Labor Statistics (BLS) showed that 1,341,650 certified nursing assistants, orderlies, and attendants were employed in the U.S. (Paraprofessional Healthcare Institute 2004a). A majority of these were employed in long-term care facilities and in home-health care. According to the U.S. Census, in 2000, a little over half of nursing home staff was made up of direct care professionals (Center for Health Workforce Studies 2005).

Direct care workers are traditionally female, between the ages of 25 and 50, disproportionately African American or Hispanic, unmarried, are the primary wage earner, and have a limited education, income, and little or no health insurance (US Department of Health and Human Services 2004; Beck et al. 1999; Yamada 2002; Pennington et al. 2003; Mickus, Luz, and Hogan 2004). According to William J. Scanlon, during his May 2001 GAO testimony entitled, "Nursing Workforce: Recruitment and Retention of Nurses Aides is a Growing Concern", the average age of a CNA was around 37 years (Paraprofessional Healthcare Institute 2004a). Nursing home workers tend to be less educated than hospital workers. However, about one-third of CNAs working in nursing homes now have at least some college education, which contradicts the commonly held belief that CNAs, as a population, are largely uneducated (Yamada 2002). The poverty rate for nursing home workers, around 16%, exceeds the national average of 12% to 13%. Approximately 29% of nursing home workers live at near-poverty levels. Nursing home workers are also less likely than hospital workers to have health insurance (Beck et al. 1999; Yamada 2002; Pennington et al. 2003; Mickus, Luz, and Hogan 2004). In 1999, approximately 25% of CNAs employed in nursing homes were uninsured, compared to 16% of all U.S. workers. In 2003, the median hourly

wage for all direct-care workers in the U.S. was $9.20, (the median hourly wage for nurses aides, orderlies and attendants in Texas was $8.28) less than the median wage of $13.53 for all U.S. workers (Paraprofessional Healthcare Institute 2004a). The demographic characteristics of the certified nursing assistant population are provided in Table 3.

Table 3: Demographics of Certified Nursing Assistants

Demographics of Certified Nursing Assistants	
Sex	Nine out of ten direct-care workers are women
Age	25-50 years old
Marital Status	Nearly a third of direct-care workers in nursing homes are unmarried
Children	Nearly a third have dependant children living at home
Education	Fifty percent of direct-care workers in nursing homes have a high school diploma or GED. Another 27% of those have attended college.
Income	Almost 20% of direct-care workers earn incomes below the poverty level
Benefits	Direct-care workers have low rates on health insurance

Certified nursing assistants provide much of the care in long-term care settings, both in nursing homes and in community settings (Health Resources & Services Administration 2004). CNAs are the primary caregivers for residents in nursing homes, providing about 80% to 90% of the care provided in nursing homes (Beck et al. 1999; Pennington, Scott, and Magilvy 2003). CNAs account for more than 40% of nursing home full-time employees. The workload for a CNA is usually around eleven residents for every CNA (Beck et al. 1999). In 2003, CNA hours per resident day was 1.9 in Texas compared to 2.2 in the U.S., making Texas ranked 45th in the nation. This is a sign that nursing assistants are working in facilities that are short-staffed

The Bureau of Labor Statistics projects that 868,000 new direct-care positions will be created by 2012. This will represent a 34% increase over the number of positions in 2002. The percentage increase in nurse aides, orderlies and attendants will be approximately 25%, less than the increase in personal and home health aides, “but the sheer number added will be larger, placing nursing assistants in the top ten occupations

with the largest job growth between 2002 and 2012" (Paraprofessional Healthcare Institute 2004a).

In general, CNAs say that they "love their jobs." They have a commitment to the residents they care for, with a desire for long-term employment, and are committed to providing high-quality care. According to the CNAs interviewed by Pennington, Scott and Magilvy in 2003, good leadership, teamwork, and administrators who were willing to help made positive working conditions possible (Pennington et al. 2003). The problem, according to the U.S. Department of Health and Human Services (2004), is that the CNA worker pool is shrinking. Because of this, it is imperative that we retain the workers we already have.

The problem of recruitment and retention is a complex one. One problem is that CNAs receive inadequate training and when they do receive training it does not resemble typical on-the-job demands. When training is inadequate, turnover is highest in the first three to six months of employment. Current training often does not prepare CNAs for the challenges they will face at work. It does not teach them how to deal with clients and families, communicate effectively, to solve problems and think critically (Center for Health Workforce Studies 2005). Other problems include low wages and difficult working conditions. Because CNAs provide most of the hands-on care to residents, and this work is physically demanding, CNAs have among the highest injury rates of any occupation (higher than coal miners and construction workers). Low job satisfaction and few opportunities for professional growth also contribute to problems with recruitment and retention (Center for Health Workforce Studies 2005).

This chapter provided information about the nursing workforce shortage and the increased demand for healthcare workers. I identified organizational culture as an important factor to consider when studying workforce outcomes. This chapter described some factors contributing to high levels of CNA turnover and low levels of job

satisfaction such as poor management practices, poor teamwork, lack of respect from co-workers and supervisors and poor wages and benefits. Organizational practices that have a positive impact on workforce outcomes were also described. These include high quality leadership and management, a set of work organization and care practices to relieve job stress and an adequate staff-to-resident ratio. In this chapter, I identified wages and benefits as an important contributor to CNA recruitment and retention. However, I also stated that wages and benefits are not likely to improve in the near future and so, this study focuses on other interventions that may be used to improve CNA perceptions of working conditions. Finally, this chapter described the baby boomer, long-term care user and CNA populations. The following chapter will provide a review of the relevant literature and will include descriptions of specific programs designed to improve recruitment and retention of CNAs.

Chapter 3: Review of the Literature

This chapter provides a review of the literature relevant to this study. The chapter includes descriptions of studies that have shown the connection between CNA job quality and quality of resident care and research that has shown the positive effects of different interventions on recruitment and retention of CNAs and improving working conditions. Descriptions of specific programs or interventions that have been identified as best practices through evidence-based research are included in this chapter.

3.1 Quality of Care

Well-trained CNA's are essential to high-quality care (Pennington et al. 2003). Direct-care workers provide approximately eight out of every ten hours of nursing home care. Quality of care and resident quality of life are linked because direct care workers spend more time with residents than any other provider does, and this gives them a unique insight into resident care. Direct care workers' job satisfaction may influence the quality of resident care and residents' quality of life (Mickus et al. 2004). Both quality of care and resident quality of life decline when trained and experienced direct-care workers cannot be recruited and retained in long-term care settings (Health Resources & Services Administration 2004).

In 2002, Robyn Stone and her colleagues from the Institute for the Future of Aging Services conducted an evaluation of the Wellspring Model. Wellspring Innovative Solutions, Inc., is an alliance of 11 independent nursing homes in eastern Wisconsin. The Wellspring Model was founded in 1994 and became fully operational in 1998. Preliminary analyses of the Wellspring Model suggested that it was a promising approach to improving the well-being of nursing home residents by improving care and reducing staff turnover. The Wellspring Model includes, "an alliance of nursing homes with top management committed to this approach, a shared program of staff training, clinical

consultation, and education from a geriatric nurse practitioner, comparative data on resident outcomes, and a structure of multidisciplinary care resource teams empowered to develop and implement interventions that their members believe will improve the quality of care for residents." The evaluation was conducted over 15 months using site visits; interviews and focus groups with staff, residents, and families; participant observation; and analyses of secondary data sources. The findings of the evaluation were that the Wellspring Model successfully put together clinical and cultural change in order to improve quality in nursing homes. The nursing homes using the Wellspring Model had improved quality outcomes, better retention rates, and reduced turnover rates (Stone et al. 2002). While this study has taken an important step in identifying a method that could improve retention, improve care, and improve resident quality of life, it does not provide information about work conditions prior to the application of the Wellspring Model, nor does it give information about the work conditions at the facilities not using the Wellspring Model. It also does not discuss what needs to be done to establish commitment from staff. These are all factors that should be examined in the future.

3.2 RECRUITMENT AND RETENTION

The stigma attached to nursing assistants can influence the decision individuals make when deciding whether to enter the field of nursing home care. Nursing assistant positions are thought to be low-wage, unpleasant occupations that involve caring for incontinent, cognitively unaware old people (Stone and Weiner 2001). In 1958, Everett Hughes coined the term, "dirty work," to describe the work of CNA's (Callahan 2001).

Health and long-term care policy can also affect individual decisions about entering and staying in the field (Stone and Weiner 2001). Worker recruitment and retention are affected by wages, benefits and training opportunities. Entry training required for nursing assistant certification has been the focus of regulation in the past; however, more attention needs to be paid to training that will 1) increase the specialized

skills of CNA's and 2) influence group cohesion—such as team building and empowerment training (Stone and Weiner 2001). The federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA), created by the Temporary Assistance for Needy Families (TANF) program, encourages a "work first" strategy (a policy that requires individuals to work before they begin training) that prevents nursing homes from participating. This strategy discourages skill-based training and conflicts with nursing home training requirements that stipulate that nursing assistants must complete a certification course before beginning work (Stone and Weiner 2001; Dawson and Surpin 2001).

Three themes have been identified when addressing issues of CNA recruitment and retention: improved wages and benefits; additional training and opportunities for career advancement for CNA's; and, additional support for employees as well as improved work conditions, job skills, and social supports (Scanlon 2001; Weiner 2003). Recent research has indicated that nursing assistants who are given added responsibilities and autonomy are more motivated to stay in their jobs (Stone and Weiner 2001).

Alexander et al. found that turnover was directly related to work hazards, professional growth opportunities, role clarity, workload, autonomy, and relationships with coworkers (Pennington et al. 2003). The jobs of direct-care workers are physically and emotionally demanding. The patient load is often excessive with pressure from managers to increase speed, resulting in increased job stress. These jobs are often poorly designed and supervised with few-or-no opportunities for advancement. Workers tend to perceive a lack of respect from management (Health Resources & Services Administration 2004).

Wages are the strongest predictor of turnover of direct-care workers. Perceived lack of respect and lack of control from supervisors were also important factors related to turnover. Nursing home workers expressed dissatisfaction with high caseloads and not

being valued by their supervisor as important factors in their decisions to leave their current position. Despite adverse work conditions, direct care workers still reported overall job satisfaction. Reasons for intention to leave their current position were, again, lack of respect by supervisors and lack of control over their jobs suggesting that if the direct care workers had been more satisfied with those two factors they may not have considered leaving, despite dissatisfaction with their pay rate (Mickus et al. 2004).

In 2003, Maureen Mickus and colleagues conducted a study to examine what factors contribute to entering direct-care work, and what factors are related to retention. Data were collected based on a random sample of workers from the nurse's aide registry obtained from the Michigan Department of Community Mental Health and from a convenience sample of direct-care workers in home health settings collected from twelve Michigan Home Health Association members. Over 1,100 direct care workers completed a mail survey in which they remained anonymous. Mickus et al. found that individuals chose to become direct care workers because they had a desire to help others. They also found that wages and household income were the main factors related to turnover. Perceived lack of respect, lack of control from supervisors, high caseloads, and not being valued by the employer as important were identified as other reasons to leave the field. Intent to turnover was predicted mainly by lack of respect from supervisors and lack of control over their jobs (Mickus et al 2004). This study showed that there were internal reasons why an employee chose to leave, not just external reasons such as wages. Mickus et al. did not, however, take the next step to discuss what could be done to improve these conditions.

Ruth Anderson and colleagues (2004) conducted a study to look at the effects of administrative climate, communication patterns, and the interaction between the two on turnover (controlling for facility context). Using a random sample of Texas nursing homes, 3,449 employees completed a self-administered questionnaire that measured

perceptions of management practice at the facilities. The sample included nursing home administrators, directors of nursing, registered nurses, licensed vocational nurses, and certified nursing assistants. The results showed that both climate and communication affected turnover and that the interaction between the two predicted lower turnover. Anderson et al. found that reward-based administrative climates, and higher levels of communication openness and accuracy, contributed to lower turnover of certified nursing assistants (Anderson et al. 2004). While this finding will help nursing homes determine what parts of their management practices to focus on, it does not go on to focus specifically on how to improve these conditions or what programs may work for nursing homes trying to improve their work environments.

High turnover is a sign of an adverse work environment. Implementing programs to improve these conditions may decrease turnover, as well as improve quality of care and ultimately resident quality of life. We need to know what programs work and how to get employees involved.

3.3 WORK CONDITIONS

There is some evidence to suggest that low job satisfaction results in absenteeism, reduced commitment to organizations, greater turnover and increased stress. Leaders and managers who acknowledge the importance of participative management, employees' participation in planning processes, and the role of effective lines of communication with supervisors may affect levels of job satisfaction. Kim's study (2002) suggested that employee participation in planning contributed to organizational effectiveness. Kim also suggested that good communication between supervisors and employees should be pursued in order to facilitate effective strategic planning. Effective communication is a significant factor in keeping employees informed of the objectives and job expectations that come with new organizational structures (Kim 2002).

Empowerment means being able to exercise independent thoughts and decisions on the job and to influence organizational processes. Empowerment leads to greater organizational investment and commitment. When CNA's are empowered, organizational performance improves (Nakhnikian and Kahn 2004). Empowerment is associated with attempts to increase worker power and influence. Empowerment is thought to lead to increased productivity and effectiveness. It is also seen as a process of personal growth and development. Empowerment may have direct effects on job strain and job satisfaction (Kuokkanen, Leino-Kilpi, and Katajisto 2002).

Sara Campbell (2003) conducted a pilot study to explore nursing home employees' and residents' experiences with empowerment and disempowerment. The study was conducted in a for-profit nursing home in Illinois. Five certified nursing assistants participated in the study along with fifteen other employees (9) and residents (6). The CNA's participated in audio-taped, semi-structured interviews that focused on empowering and disempowering experiences throughout their lives. The themes identified by the nursing assistants were: appreciation, trust, self-fulfillment, relationship dilemmas, and unwelcoming. The methods chosen to address disempowerment issues were: additional education, improved relationships between nurse aides and residents, administrative and nursing leader verbal appreciation on a regular basis, instill accountability, set up peer review sessions, and engage assistant/nurse teams to address continuous quality-improvement issues (Campbell 2003). This study offered some steps to improve empowerment, but did not go on to discuss what is needed for these steps to be successful.

In 2003, Pennington and colleagues conducted a small pilot study including structured interviews with 12 CNAs in 6 Colorado nursing homes, and observations of care in order to more fully understand the experiences of CNAs. The main theme identified by Pennington et al. was that certified nursing assistants, "love their jobs." The

researchers mapped out three patterns of thought and behavior: attributes of the CNA, working conditions of the CNA, and future success of the CNA and the nursing home. Working conditions that affected the nature of the job were leadership, teamwork, clean environment, and a need for respect. Other important issues for the CNAs were job enrichment opportunities, personal growth opportunities, recognition, responsibility, and a sense of achievement. While this study was too small to be representative of the population, it did focus on the needs of certified nursing assistants showing that at least some are not getting what they need from their jobs (Pennington et al. 2003). The study showed that work conditions play an important part in the push towards high quality of care and improved resident quality of life. The study did not, however, ask the 12 certified nursing assistants whether the facilities where they worked were doing anything to improve their work conditions.

The Nursing Home Community Coalition of New York State (NHCCNY) argued in their 2003 report on work conditions that poor working conditions was a major factor in the shortage of certified nursing assistants. The coalition also cited other studies finding relationships with staff as a predictor of resident quality of life and that the work force shortage was negatively affecting care. In 2003, NHCCNY conducted a study looking at what makes for a good working condition. They held focus groups in six New York nursing homes with a sample of CNAs, registered nurses and licensed vocational nurses interviewed separately. They also sent out questionnaires to the remaining staff to ask them to answer questions regarding the focus group responses. One hundred and two CNAs participated in the focus groups and another 221 responded to the questionnaire. The common indicators of good working conditions were: being treated with respect, having enough staff to care for the residents, having a good relationship with supervisors, and working together as a team. Some the themes identified specifically by the CNAs were: being trusted by supervisors, being informed of changes before the change, having

a good working relationship with supervisors, having all staff work together as a team, and having the tools to do the job (Nursing Home Community Coalition of New York State 2003). This study paints a bleak picture of working conditions for nursing home staff but does not offer recommendations as to how to improve these conditions. The authors say that a solution needs to be developed but do not offer any suggestions.

3.4 SPECIFIC PROGRAMS

Peer Mentoring

Research suggests that most of the turnover in a Long-Term Care (LTC) facility takes place during the first three months of employment. But facilities also lose seasoned staff because there are no opportunities for advancement and job growth. Peer mentoring can solve both of these problems by offering much-needed support to new employees while providing seasoned employees the opportunity to get additional training and advance within the agency. New direct-care workers leave their jobs because they feel isolated and because they feel inadequately prepared for the realities of the job. Mentors can ease this transition and help new CNAs feel a part of the organization. Peer mentor programs also provide an opportunity for mentors to take on new responsibilities and grow both personally and professionally (Paraprofessional Healthcare Institute 2003).

A peer mentor program is designed to:

- Improve retention of new CNAs
- Improve the care new CNAs provide
- Use experienced nursing assistants as role-models for care
- Support new staff as they get used to the new environment and become part of the facility team
- Reward and acknowledge the contributions of excellent nursing assistants
- Help create a positive nursing home environment

In 2004, the Direct Care Clearinghouse conducted an evaluation of *Growing Strong Roots*, a peer mentor program implemented in 11 nursing homes in New York State. Five-to-fifteen experienced CNAs were recruited to serve as mentors. The findings of the study showed that mentoring created a supportive and caring environment within the nursing home and worked well for residents. The relationships developed between peers allowed them to ask questions about resident care or ask for help when they were overwhelmed. The program created a safer work environment, reduced turnover, increased self-worth of mentors and new staff became more confident more quickly. This type of program could contribute to improved work environments in the future if properly implemented (Direct Care Clearinghouse 2004.)

Enhance Staff-Family Communication

Family members often maintain close ties with relatives in nursing homes. Family members also tend to feel considerable stress related to placing a relative in a nursing home and adapting to life in a nursing home. Family member relationships with certified nursing assistants can be a source of much stress and strain for both the family and the caregiver. There is often a mismatch between the care a family member thinks their relative should receive and the kind of care a CNA can provide in a bureaucratic, routinized, institutional setting (Cornell Gerontology Research Institute 2003).

The *Partners in Caregiving Program* works to develop improved communication skills of both family members and staff and focuses on discussing (and recommending changes to) facility policies and procedures. The program begins with two parallel workshop series, one for staff and one for family members of residents on the same unit, and ends with a joint meeting of family and staff participants with nursing home administrators (Cornell Gerontology Research Institute 2003).

The *Partners in Caregiving Program* was evaluated by the Cornell Gerontology Research Team using a randomized, controlled intervention study with staff members and

relatives of residents from 20 not-for-profit nursing homes in Central New York. The results showed that family members perceived more empathy on the part of staff, and staff perceived family behaviors towards them to be more positive. In addition, staff members felt more positive about their jobs and there was a reduction in the likelihood of quitting. Finally, reports of conflicts between staff and family members of residents with dementia declined. This program is continuing to grow and improve and offers an evidence-based approach to improving staff-family relations and well as improve staff perceptions of work conditions (Cornell Gerontology Research Institute 2003).

Career Ladders

A 'career ladder' is a program designed to offer wage increases, more training opportunities and other incentives to reward employees who stay with a facility for longer. The Extended Care Career Ladders Initiative (ECCLI) was begun in 2000 in Massachusetts as part of a broader Nursing Home Quality Initiative. It was designed to offer training opportunities to direct care workers in order to reduce high turnover rates and vacancies among direct care workers and to improve quality of care provided to consumers. Preliminary results of an evaluation done by Wilson, Eaton and Kamanu at the Weiner Center for Social Policy in 2002, showed that the ECCLI was having a positive impact. The study provided some evidence that

> "1) multi-year, multi-faceted initiatives are essential to organizational change initiatives; 2) working with a workforce 'network' rather than just individual providers is more effective; 3) organizing and sustaining culture change and training programs require serious investment at the facility level; 4) wage increases need to be of meaningful size to workers to have a positive effect; 5) the support of nurse supervisors is critical to the success of ECCLIE initiatives; and 6) working relationships developed through the implementation phase have improved through increased teamwork and communication and the relationships that have formed between departments, as well as between aides and their supervisors."

Career ladders are becoming increasingly popular among some states and providers. They provide an opportunity for CNAs to gain new skills and increase their

wages, thereby reducing turnover and improving perceptions of job quality (Harris-Kojetin, Lipson, Fielding, Kiefer and Stone 2004).

Alternative Management Practices

Self-managed work teams are groups of employees who are responsible for all aspects of their jobs, including technical and managerial aspects. These groups may plan how to accomplish work for the day, schedule who will do what, and monitor the team's performance. Yeatts and his colleagues did a study in 2004 examining the advantages and costs of using self-managed work teams in nursing homes, steps that are being taken to implement the teams, and management strategies being used to manage the teams. Yeatts used a quasi-experimental design to group CNAs into teams in five nursing homes in the Dallas-Fort Worth metropolitan area, and five additional nursing homes as the control group. They found positive effects of the teams, but quantitative analyses are not yet complete. Steps taken for implementation are 1) surveying management to be sure they want the teams; 2) orienting and training managers, nurses and nurse aides; and 3) facilitating the teams. Management of the teams includes collecting routine feedback from all involved in the teams and using a "give-and-take" approach. This study will eventually give a thorough example of how to start and successfully use self-managed work teams in a nursing home (Yeatts et al. 2000; Yeatts at al 2004).

Support Systems, Training and Education

Innovative new employee development and retention programs are needed because of the decreasing long-term care labor pool and the high rates of job dissatisfaction, burnout and employee turnover all occurring at a time when the long-term care industry is having to care for people with increasingly complex and time-consuming medical needs.

The Retention Specialist Project provided new information about the problems of retaining direct care workers. A staff person from each participating facility was

designated as the retention specialist. This individual received tools and ongoing support to conduct a needs assessment at their facility, implement retention programs and evaluate their success (Pillemer and Meador 2006).

A study or the Retention Specialist Program, conducted by a research team from Cornell University, used a randomized control-group design to test the effectiveness of the retention program. The researchers recruited 32 nursing homes (16 control and 16 intervention) from New York and Connecticut. Project staff interviewed 1,137 CNAs at three points during the study (baseline, 6 months and 12 months) and 32 nursing home administrators. CNAs were asked about their job satisfaction; the perceived effectiveness of the facility's retention efforts; likelihood of quitting in the next 12 months; how frequently they thought about quitting; and how stressful their job was. Turnover declined in the treatment group compared to the control group. The program had a positive effect on general perceptions of nursing home quality and especially on the perception of CNAs regarding facility efforts to train and retain staff. The positive effects were not sustained after the first six months, suggesting that additional activities such as "booster" sessions might help to maintain the intervention effects (Pillemer and Meador 2006).

This study shows how important one individual can be to nursing home retention efforts, assuming they have appropriate training and ongoing support. This is true because the large scope of possible retention solutions requires specialized expertise; the success of the retention specialist suggests that focusing on individual programs is less effective than a continuous, integrated approach within the confines of the organization; and a specific individual can play a critical role in solving retention problems (Pillemer and Meador 2006).

The *WIN A STEP UP* (Workforce Improvement for Nursing Assistants: Supporting Training, Education, and Payment for Upgrading Performance) intervention

is aimed at improving working conditions for CNAs in North Carolina's nursing homes. The CNAs attend classes and remain employed at the facility for an agreed-upon amount of time. The facility agrees to commit staff time to completing the program and give out a retention bonus or wage increase to all CNAs who complete the program. The intervention has also expanded to include supplementary training for nursing assistant supervisors. The CNA training sessions focus on clinical proficiency, interpersonal skills and communication (Konrad and Morgan 2006).

An evaluation of the WIN A STEP UP program was conducted by Thomas Konrad and Jennifer Craft Morgan of the University of North Carolina (UNC) Cecil G. Sheps Center for Health Services Research and the UNC Institute on Aging. The study included eight nursing homes using the WIN A STEP UP program. Ten similar nursing homes served as the comparison group. Data were collected from interviews with managers, organizational data, a "nursing assistant working conditions" survey and "perceived quality of care" survey, nursing assistant performance measures and a coaching supervision participant survey. Study results showed that

- Managers reported increased job satisfaction/morale and improved quality of care among their CNA's,
- Turnover of managers, as well as the nursing assistants, continues to be the greatest challenge for both program implementation and program evaluation,
- Improved job performance or program participants,
- Improved job quality and quality of care,
- Coaching supervision is the likely cause of improved perceptions of quality of team care, and
- WIN A STEP UP seems to benefit program participants more than participating sites (Konrad and Morgan 2006).

This program is showing some promising results. The use of this program can result in modest improvement in turnover, improved quality of care and supportive leadership, improved morale and perceived financial and career rewards among participants. Because of its limited impact on turnover, this program may serve only as a small step towards improved retention (Konrad and Morgan 2006).

Culture Change Initiatives

Culture change can have many meanings, but in this case, the term "culture change" represents the process that nursing homes go through when trying to change the way the organization operates so that they may provide better quality care to their residents and a better work environment for their employees.

Project LEAP (Learn, Empower, Achieve, Produce) is a workforce development program focusing on educating, empowering, and retaining nursing managers and staff in nursing homes. The goal of LEAP is to produce high quality, dedicated long-term care leaders and staff that will result in improved resident quality of life. LEAP includes a six-week 18-hour workshop series for nurse managers and charge nurses and focuses on the key roles of leader, team builder, care role model, and gerontological expert. The program also includes a seven-week, 17.5-hour workshop series for CNAs focusing on career development, including training on person-centered care, communication skills, cultural sensitivity, building care teams, mentoring new CNAs, and working with families. LEAP also includes a two-level CNA career ladder.

According to program developers Ortigara and Hollinger-Smith, the success of LEAP is dependent upon the commitment of management to promote LEAP and sustain the program throughout the facility. Two LEAP test facilities reported a statistically significant reduction in nurse and CNA turnover rates after the program began. CNAs at these facilities showed statistically significant improvements in work empowerment, job satisfaction, and perceptions of organizational climate (Harris-Kojetin et al 2004).

Other Initiatives

A New York Times report (2004) on a new home health care corporation is a good example of how an egalitarian work environment can increase job satisfaction and recruitment while decreasing turnover. Cooperative Home Care Associates in the South Bronx, New York, is an employee-owned corporation (Greenhouse 2004). Workers can buy one share of the company and the health aides elect 8 of the agency's 12 board members. This worker- board controlled sets wages, benefits, end-of-year bonuses and dividends and the annual contribution to the workers 401(k) plans. Health Aides with Cooperative Home Care Associates make more than at other agencies and they are eligible for health insurance. Cooperative Home Care Associates also gives its employees what is considered the "best training program in the business" consisting of at least four weeks of free training. The corporation will subsidize its employees if they want to take college courses to become nurses and guarantees at least 30 hours of work per week. If workers are having child-care problems, the cooperative counselors help the employee locate childcare. Cooperative Home Care Associates provides a sense of unity. The agency's low turnover rate means that it doesn't have to spend so much on training new employees. There are limitations to Cooperative Home Care Associates' excellence. Workers complain about too few raises and bonuses. The board has voted for no raises for the past five years because Albany and Washington are reducing home care reimbursements. Even though workers may be frustrated, they understand that the board members are not receiving raises either and that they have to share in the "good and not so good." Workers are willing to make compromises for the good of the company (Greenhouse 2004; Mickus et al. 2004).

The studies discussed in this chapter are some examples of ways to improve quality of care, reduce turnover, and improve work conditions. Some of these programs represent significant steps towards retaining CNAs and improving their work conditions.

They do not, however, make clear suggestions as to how to get employees committed to these programs and how staff involvement could affect the outcomes of these programs no matter how well they are designed. Research has not addressed CNA commitment to these programs and how commitment may interact with the relationship between program implementation and work condition outcomes. When CNA's are not committed, any program would have a hard time succeeding.

An important next step in the work towards improving CNA work conditions is to provide nursing homes with step-by-step guides on how to find information about programs available to them, how to gain access to these programs and implement them, and how to ensure program success. The nursing homes in Austin seemed unaware of the resources available to them and the evidence-base that may influence their practice. The nursing homes in Austin who participated in this study are not using the majority of these programs. It is important that there be a "diffusion of knowledge" between those in the academic and professional community who are making research advances in this area and those in the healthcare community who are most in need of this information.

This chapter has provided a review of the relevant literature focusing on improving quality of resident care, recruitment and retention of direct care workers and work conditions. Examples of the types of program and interventions that can have positive effects on CNA perceptions of their working conditions were reviewed including a peer mentor program, a career ladder, an alternative management practice initiative, a support system, training and education program and other culture change initiatives. These programs have been shown to improve working conditions and assist in recruitment and retention of CNAs. These types of programs will assist long-term care facilities as they make efforts to retain and build a qualified CNA workforce that is able to provide high quality care to residents. The next chapter describes the methodology for

this study including a description of the sample, the survey instruments and data collection procedures and the results of the statistical analyses of the data.

Chapter 4: Methods

I describe the methodology of the study in this chapter. The chapter includes a discussion about how I chose my sample size, collected my data and designed my data collection instrument. I then provide a description of my sample including demographics of the CNA respondents and the facilities from which I collected the data. The last section of this chapter describes the results of the statistical analyses of the data.

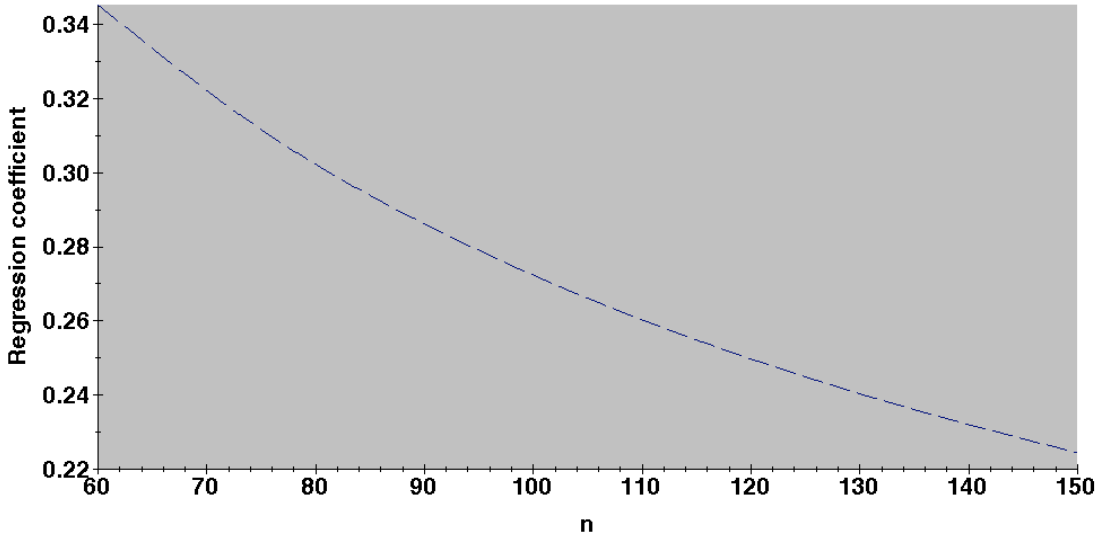
4.1 SAMPLE SIZE

Based on the results of a power test conducted with nQuery Advisor, I decided that a sample size of 100 certified nursing assistants was appropriate. To detect an *r* of 0.100 (with $\alpha = .05$), at 80% power, a sample size of 779 is required. To detect an *r* of 0.300 (with $\alpha = .05$), at 80% power, a sample size of 82 is required. To detect an *r* of 0.500 (with $\alpha = .05$), at 80% power, a sample size of 26 is required (Gatsonis and Sampson 1989). I reason that a sample size of 100, given my time and financial constraints, is sufficient. I argue that being able to detect an *r* of .300 (n=82) is substantively significant for the purposes of this study and a sample of 100 would allow for any missing data and would increase the likelihood that at least some of the CNAs in the study would be participating in some programs. The following are the printouts provided by nQuery. Table 4 illustrates the sample sizes calculated by the program given regression coefficients of 0.100, 0.300, and 0.500. The regression coefficients for a sample size between 60 (original chosen sample size) and 150 (sample size proposed by Dr. Ross) are illustrated in plot form in Figure 3.

Table 4: Power Analysis – Test for Sample Size

Power Analysis: Test for Sample Size			
	1	**2**	**3**
Test significance level, a	0.050	0.050	0.050
1 or 2 sided test?	2	2	2
Regression Coefficient, r	0.100	0.300	0.500
Power (%)	80	80	80
n	779	82	26

Figure 3: Power Analysis Plot – Test for Sample Size Between 60 and 150[1]



4.2 DATA COLLECTION

I conducted a pilot study to test the instruments to be used in the CNA questionnaire. The pilot study consisted of two parts. To determine if appropriate wording was being used throughout the instruments, and to determine if the instrument was clear, I asked five certified nursing assistants working in one Austin area nursing home to look over the instrument and provide feedback. Changes were made to the instrument based on this feedback. The second phase of the pilot study consisted of

[1] a=.05, power=80%

administering the instrument to thirty-seven certified nursing assistants from the first and second nursing home to participate in the study. Cronbach's alpha was used to test instrument reliability. The results of these tests will be discussed in a later section. After completing the pilot study, no changes were made to the instruments and the pilot study group was included in the larger study.

I contacted twenty-one Medicare and/or Medicaid certified facilities in Austin by telephone, to ask the administrator whether they would be willing to fill out a one-page questionnaire asking them to identify all of the programs, awards or incentives they were offering to their CNAs to improve their work conditions. The form was sent to fourteen facilities by e-mail and six facilities by mail. I was unable to contact one facility. Twelve facilities returned the questionnaire. Of those returned, ten were originally sent by e-mail and two were originally sent by mail. Of these, nine facilities were contacted about participating as data collection sites. The order in which nursing homes were contacted was based on the number and type of programs offered to employees. Facilities with more programs were contacted first. One administrator did not enter the name of their facility and could not be identified for contact. The remaining two facilities were not contacted because data collection was complete. Of the nine facilities contacted, seven agreed to participate as data collection sites. One facility administrator said that he would only allow me to collect data at his facility if he personally distributed and collected the surveys, thereby breaking the confidentiality agreement with study respondents. The other facility administrator said that his supervisor would not allow me to use the facility as a data collection site because it would open up the facility to solicitation.

After the pilot study was complete, I began contacting nursing homes and colleting data from CNAs. Data were collected in-person from each facility. I visited each facility a number of times, collecting data from CNAs working the morning,

afternoon and night shifts. Before data collection began, I set up an initial meeting with each nursing home administrator to discuss times and dates for data collection, where the most convenient place for me to set up would be and to discuss the administrators role in the data collection process. Administrators were told that the information would be kept confidential, but that each facility would receive a summary report of findings for their facility. I had some problems maintaining the confidentiality of CNA participants during my thesis research because the administrator, director of nursing and staff coordinator were very interested in the success of my study and so they would follow me around the facility and tell CNAs that they had better fill out my questionnaire. This would be considered helpful behavior in some settings, but in this case CNAs were less likely to complete my questionnaire if they thought the management staff knew who was participating. They were also less likely to reveal more negative attitudes about the facility. Because of this experience, I was very clear with administrators that they needed to remain uninvolved with the data collection process and that I would not be providing them a list of CNAs who had participated in the study. This approach was successful in most cases. There was one assistant administrator who followed me around the facility and asked for a list of which CNAs had participated so that they may follow-up with these CNAs with their own study. I refused to provide this information and informed the assistant administrator that they needed to allow CNAs to participate in my study on their own accord without pressure from management staff.

After this meeting, flyers were posted to provide information about the study and when and where interested CNAs could find me. I also brought along a basket of candy to attract possible respondents. The CNAs could take the questionnaire and complete it on their own, or they were told we could fill it out together. Most respondents chose to complete it on their own. Questionnaires were completed while I was in the facility each day. After the respondent completed the questionnaire they received a small incentive. I

had 100 gift cards to Sonic for a free drink and free sandwich and 100 coupon books to Bennigans. Each questionnaire was pre-marked with an identification number that allowed me to identify the respondent and the facility from which the data was collected and ensured participant confidentiality. No identifying information was entered into the data file. Only the consent forms have both participant name and identification number. The instrument took approximately 20 minutes to complete.

4.3 INSTRUMENTS

Data were collected using original instruments, a revised version of the Health Care Worker Survey (Mickus, Luz and Hogan 2004), and revisions of questionnaires included in the Institute for the Future of Aging Services (IFAS), *Measuring Long-Term Care Work: A Guide to Selected Instruments to Examine Direct Care Worker Experiences and Outcomes*. The guide was released in November 2003 and is available on the IFAS website at www.futureofaging.org. All of the instruments described below were found in the guide with the exception of the original instruments and the Health Care Worker Survey. These instruments are the most commonly used instruments to study the direct care workforce. Some of these instruments are still under revision in order to improve their internal consistency. However, these are the best instruments available to date and so I used them in this study despite their limitations.

Pre-Existing Instruments

Perception Empowerment Instrument (PEI)

This instrument measures three dimensions of empowerment: autonomy, participation and responsibility. The questionnaire uses a five-point scale, from strongly agree to strongly disagree. The PEI takes approximately five to ten minutes to complete. Words that need replacing are: department, solicited and autonomy. These words are not appropriate for the population being studied. Internal consistency ranges from 0.80 to

0.87 for the subscales. Criterion-related validity was reported at 0.82, but specific criterion used was unclear. The instrument can be accessed on-line and has been made available with the permission of Dr. Kirk Roller.

Health Care Worker Survey

This instrument was designed by Maureen Mickus, Clare C. Luz and Andrew Hogan at Michigan State University. The questionnaire was used in their study entitled, "Voices from the Front: Recruitment and Retention of Direct Care Workers in Long-Term Care Across Michigan." The instrument includes questions about direct care workers backgrounds and work experiences including worker-supervisor relationships, reasons for becoming a direct care worker and reasons for leaving their previous place of employment. This instrument is being used with permission of Dr. Mickus.

Job Role Quality Questionnaire

This instrument was developed through a National Institute of Occupational Safety and Health (NIOSH) funded project. The Job Role Quality Questionnaire was designed to measure job strain that leads to negative mental and physical health outcomes. There are thirty-six items organized into eleven subscales (five job concern subscales and six job rewards subscales). The questionnaire instructs the respondent to, “think about your job right now and indicate on a scale of 1 (not at all) to 4 (extremely), to what extent, if at all, each of the following is a concern for you”. Words that need replacing are: supervisor, monotony, strenuous, authority. Words that may be used in their place are: staff nurse, nursing home administrator, repetitive, active, power. Internal consistency ranges from 0.48 to 0.87 for the subscales. Construct validity was confirmed for the subscales using confirmatory factor analysis. Reports of different job demands affected criterion-related validity. Permission is not needed to use this instrument.

Job Satisfaction Single Item Measure

Single item measures of job satisfaction (five-point scale) take less space, require less time and have more face validity. Single item measures correlate relatively well (0.63 or higher) with other multi-item measures. Single item measures have their limitations including un-assessed internal consistency and measures of reliability and they cannot be used in structural or measurement models. The single item measure takes less than one minute to complete. Permission is not needed to use this instrument.

Intent to Turnover: The Michigan Organizational Assessment Questionnaire (MOAQ)

This instrument was developed as part of a larger survey measuring employee perceptions. This instrument focuses on intent rather than attachment. The first two questions are on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). The third question is on a seven-point scale from 1 (not at all likely) to 7 (extremely likely). This instrument takes approximately five minutes or less to complete. The instrument may need to be tested for readability with direct care workers. The internal consistency score was 0.83. Permission is not needed to use this instrument.

Role Overload Scale: The Michigan Organizational Assessment Questionnaire (MOAQ)

This instrument was used with a battery of assessment scales with reliability and validity well established with industrial workers. It has been suggested that asking direct care workers about how many residents they feel they can take care of (by shift, by unit, with the kind of patients you have) in order to feel good about your job would be useful information for future research. The three items are on a seven-point scale from 1 (strongly disagree) to 7 (strongly agree). The survey takes approximately two minutes to complete. The internal consistency of the scale is 0.65. Permission is not needed to use this instrument.

Revised and Original Instruments

The revised questionnaires included sections from the questionnaires described above. The answer choices have been changed on some sections and some wording has been simplified for the population being studied. I conducted a test of reliability on each of the revised instruments.

Demographic Questionnaire

This questionnaire includes twenty items from the Health Care Worker Survey. The variables in the first section of the questionnaire include demographic variables such as: age, sex, race, ethnicity, marital status, parental status, education and income. The second section of the questionnaire includes questions from the work experience section of the original instrument including: where are they currently employed, employment status, hours per week, reasons for becoming a CNA, reasons for leaving their last job, additional paid employment and insurance coverage. The answer choices have not been modified from the original questionnaire with the exception of removing, "multi-racial or bi-racial" from the race question, "LVN or RN" from the education question, and "member of an unmarried couple" from the marital status question while adding "married/member of a cohabiting couple".

Program Information and Commitment Questionnaire (Original Instrument)

This questionnaire includes eleven questions focusing on programs being offered in nursing homes to certified nursing assistants, and CNA commitment to these programs. The instrument will yield measures of three concepts: participation, nursing home effort, and CNA commitment. Participation was coded as a percent, calculated using the number of programs identified by the CNA as being offered by the facility and the number of programs in which the CNA indicates they have chosen to participate. Nursing home effort was coded into three variables: effort to provide information, effort to increase participation, and effort to increase commitment. CNA commitment was

constructed using the mean response to questions 10 and 11. Answers to the open-ended questions were coded and analyzed using contextual analysis (taking counts, identifying themes, and creating categories). Questions 7-11 were coded on an ordinal scale of 1-10. The internal consistency score for the section of the instrument asking program participants to rate nursing home effort was 0.949. The questions included in the analyses were:

- On a scale of 1-10, how much effort did the nursing home put into providing information about these programs, with 1being no effort and 10 being a lot of effort?
- On a scale of 1-10, how much effort did the nursing home put into convincing you to participate in these programs, with 1being no effort and 10 being a lot of effort?
- On a scale of 1-10, how much effort did the nursing home put into proving to you that these programs are worthwhile or important, with 1being no effort and 10 being a lot of effort?

The internal consistency score for the section the instrument, asking program participants to rate their commitment to the programs and the importance of the programs to the work they do each day was .859. The questions included in the analyses were:

- On a scale of 1-10, how committed are you to these programs (in general), with 1 being not committed at all and 10 being extremely committed?
- On a scale of 1-10, *if you participate*, how important are these programs to the quality of the work you do each day, with 1 being not important at all and 10 being extremely important?

Empowerment Questionnaire

This questionnaire includes fifteen questions from the PEI and nine questions from the Health Care Worker Survey. There are three subscales (autonomy, participation, and responsibility). The questionnaire is a four-point scale from 1 (strongly

agree) to 4 (strongly disagree) with no mid-point or neutral response. The number of items ranges from four to six with a total of fifteen. The range of possible subscale scores range from four to twenty-four and the total score scale ranges from fifteen to sixty. Higher scores indicate higher levels of empowerment. The internal consistency score for this instrument was 0.895. The internal consistency for the three subscales (autonomy, participation and responsibility) were .703, .891, .828.

Worker-Supervisor Relationship Questionnaire

This questionnaire includes ten questions from the Health Care Worker Survey designed by Mickus and colleagues. Ratings on the worker-supervisor relationship questionnaire will be referred to as measures of reciprocity. The questionnaire is a four-point scale from 1 (strongly agree) to 4 (strongly disagree) with no mid-point or neutral response. There is one total score ranging from ten to forty. Higher scores indicate more positive relationships. The internal consistency score for this instrument was 0.945.

Job Strain Questionnaire

This questionnaire included thirteen questions, twelve from the Job Role Quality Questionnaire and one from the Role Overload Scale. There are three subscales (overload, dead-end-job, and challenge). The questionnaire is a four-point scale from 1 (strongly agree) to 4 (strongly disagree) with no mid-point or neutral response. Six of the questions are reverse scored. The number of items ranges from four to five. The range of possible scores ranges from four to twenty with a total score range from thirteen to fifty-two. The internal consistency score for this instrument were 0.295. Reliabilities were also run for the three subscales: overload, dead-end job and challenge. The internal consistency scores for these subscales were 0.197, 0.786 and 0.836. Higher scores indicate higher levels of job strain.

Intent to Turnover Questionnaire

This questionnaire included three questions from the Intent to Turnover: (The Michigan Organizational Assessment Questionnaire, MOAQ). The questionnaire is a four-point scale from 1 (strongly agree) to 4 (strongly disagree) with no mid-point or neutral response. The range of scores is from three to twelve. Lower scores indicate that the respondent has less desire to leave their current place of employment and seek out a new job. The internal consistency score for this questionnaire was 0.718.

Job Satisfaction Single Item Question

This item was used as described above.

Open-Ended Questions (Original Instrument)

Open-ended questions were designed to provide additional information about CNA commitment and their perceptions of their work conditions and to provide them an opportunity to discuss programs they would like their employers to provide. The questions focused on 1) how the nursing home influenced the CNAs decision to participate and become committed 2) how the programs affect the quality of work conditions 3) and general experiences with the programs. All questions were not asked of all participants.

Nursing Home Administrator Questionnaire (Original Instrument)

This questionnaire consisted of one item. The nursing home administrators were asked to list all programs, awards or incentives they currently offered to their Certified Nursing Assistants.

Nursing Home Administrator Follow-up Interviews (Original Instrument)

The follow-up interviews consisted of sixteen questions. There were seven items soliciting operational information such as how many CNAs are employed by the facility, the number of beds available and the number of residents. Five questions solicited

program specific information such as program goals, advertisement of programs, and program evaluation. Four questions solicited general information about program implementation and success such as what barriers do management staff and CNAs face, the role of commitment in program success and administrators thoughts on the solution to improving CNA job satisfaction.

4.5 DESCRIPTION OF THE SAMPLE

The population from which the sample was drawn was all Medicare or Medicaid certified nursing homes in Travis County. I received completed administrator questionnaires from twelve of the twenty-two Medicare/Medicaid certified nursing homes in Austin. Seven facilities agreed to let me collect data in their facility. 100 CNAs completed questionnaires. The number of CNA participants from each facility is provided in Table 5.

Table 5: Number of Respondents at Each Facility

Number of Respondents at Each Facility	
Facility ID	# of Respondents
2	19
3	21
8	10
12	11
13	18
16	17
20	4
Total Facilities = 7	Total Respondents = 100

Nursing Home Information

Two tables summarizing the information provided in the following paragraphs are provided at the end of this section.

Facility two was a multi-home (chain), nonprofit corporation. It was Medicare certified and has 46 beds, 44 of which were occupied as of August 2006. This facility had a total turnover rate of 23%. They did not calculate turnover rates by position. As of

August 2006, they had 42 certified nursing assistants working in their skilled care facility, approximately 34 of which were employed full-time. There were five CNAs on the day shift, four on the evening, and three on the night shift. This translates to a number of residents to CNA ratio of one to eight for the day shift, one to ten for the evening shift and one to fourteen on the night shift. The administrator had worked at the facility for four years.

Facility three was a multi-home (chain), nonprofit corporation. It was Medicare certified and had 76 beds, all of which were occupied as of August 2006. This facility had a total turnover rate of 30%. They did not calculate turnover rates by position. However, the administrator stated that they lose approximately one CNA per month. As of August 2006, they had 29 certified nursing assistants working in their skilled care facility. There were six CNAs on the day shift, six on the evening, and four on the night shift. This translates to a CNA to resident ratio of one to eleven for the day shift, one to eleven for the evening shift and one to twenty on the night shift. The administrator had worked at this facility for nine years.

Facility eight was a multi-home (chain), for-profit corporation. It was Medicare and Medicaid certified and had 120 beds, 103 of which were occupied as of August 2006. This facility had a total turnover rate of 98%, but the CNA turnover was higher (125%.) As of August 2006, they had 50 certified nursing assistants working in their skilled care facility. There were eleven CNAs on the day shift, eleven on the evening, and six on the night shift. This translates to a CNA to resident ratio of one to nine for the day shift, one to nine for the evening shift and one to seventeen on the night shift. The administrator had worked at this facility for four years.

Facility twelve was a single home (not a chain) operated as a for-profit corporation. It was Medicaid certified and had 54 beds, 50 of which were occupied as of August 2006. The facility did not calculate turnover rates for the entire facility or by

position. However, the administrator stated that they lose approximately two CNAs per month. As of August 2006, they had 15 certified nursing assistants working in their skilled care facility, 14 of which were employed full-time. There were four to five CNAs on the day shift, three on the evening, and two on the night shift. This translates to a CNA to resident ratio of one to twelve for the day shift, one to fifteen for the evening shift and one to twenty-five on the night shift. The administrator had worked at the facility for five years.

Facility thirteen was a multi-home (chain), for-profit corporation. It was Medicare and Medicaid certified and had 126 beds, 124 of which occupied as of August 2006. The facility did not calculate turnover rates for the entire facility or by position. However, the administrator stated that they lose approximately three CNAs per month and hire approximately two to four CNAs per month. As of August 2006, they had 36 certified nursing assistants working in their skilled care facility. There were thirteen CNAs on the day shift, nine on the evening, and five on the night shift. This translates to a CNA to resident ratio of one to ten for the day shift, one to fourteen for the evening shift and one to twenty-five on the night shift. The administrator had worked at the facility for six years.

Facility sixteen was a multi-home (chain), for-profit partnership. It was Medicare and Medicaid certified and had 120 beds, 110 of which were occupied as of August 2006. This facility had a CNA turnover rate of 104%. As of August 2006, they had 40 certified nursing assistants working in their skilled care facility. There were sixteen CNAs on the day shift, twelve on the evening, and four on the night shift. This translates to a CNA to resident ratio of one to seven for the day shift, one to nine for the evening shift and one to twenty-eight on the night shift. The administrator who participated in this study had since left the facility. There had been two or three interim administrators before the current

administrator took the position. The current administrator had worked at the facility for less than a month as of August 2006.

Facility twenty was a multi-home (chain), for-profit partnership. It was Medicare certified and had 90 beds, 84 of which were occupied as of August 2006. The administrator from this facility chose not to participate in the follow-up interview and I was unable to collect further information about the facility.

Table 6: Facility Descriptions

ID	Type of Ownership	Multi-home (chain) Ownership	Medicare Participation	Medicaid Participation	Total # of Beds	Beds Occupied as of August 2006
2	Nonprofit Corporation	Multi-home (chain)	Yes	No	46	44
3	Nonprofit Corporation	Multi-home (chain)	Yes	No	76	76
8	For-profit Corporation	Multi-home (chain)	Yes	Yes	120	103
12	For-Profit Corporation	Single Home	No	Yes	54	50
13	For-profit Corporation	Multi-home (chain)	Yes	Yes	126	124
16	For-profit Corporation	Multi-home (chain)	Yes	Yes	120	110
20	For-profit Partnership	Multi-home (chain)	Yes	No	90	84

Table 7: Facility Description – CNA and Administrator Data

ID	Facility/CNA Turnover Rates	# of CNAs Employed	# of CNA/Residents Ratio by Shift			# of Years Administrator with Facility
			Day	Evening	Night	
2	NA/NA	42	1/8	1/10	1/14	4yrs
3	30%/NA	29	1/11	1/11	1/20	9yrs
8	98%/125%	50	1/9	1/9	1/17	4yrs
12	NA/NA	15	1/12	1/15	1/25	5yrs
13	NA/NA	36	1/10	1/14	1/25	6yrs
16	NA/104%	40	1/7	1/9	1/28	<1 month
20	NA/NA	NA	NA	NA	NA	NA

I ran two t-tests to look for differences between facilities and CNA scores on the work condition questionnaire based on facility size (those with less than or more than 100 beds) and ownership status (for-profit or nonprofit). No significant differences were detected.

Demographics of the Sample

Table 8 shown below is a summary of the data provided in the following two paragraphs. The sample was predominantly female (85%), married (44%) or never married (31%), black (53%) and non-Hispanic (67%.) They ranged in age from nineteen years old to sixty-six years old with a mean age of thirty-seven years old. About 42% have at least a high school diploma or GED and 34% have had some college. Fifty-one percent of the sample had no children younger than eighteen living at home, while 38% had one or two dependent children at home. Eleven percent of the sample had between three and five dependent children living at home.

Thirty-one percent of the sample had an annual total household income of between $10,000 and $19,999 and 33% had between $20,000 and $29,999. Thirty-six percent of the sample had a second job and of those, 28 (78%) were jobs in the healthcare. Over half of the sample had some form of health insurance, 45% of the

sample had health insurance through the nursing facility and another 16% had insurance from another source.

Table 8: Demographics of Sample

Variable	Most frequently occurring response	% of sample
Sex	Female	85%
Marital Status	Married	44%
	Never Married	31%
Race	Black	53%
Ethnicity	Non-Hispanic	67%
Age	Age Range	19-66
	Mean Age	37
Education	High School Diploma or GED	42%
	Some College	34%
Children	No children younger than 18 living at home	51%
	1 or 2 dependant children living at home	38%
Annual Total Household Income	$10,000-$19,999	31%
	$20,000-$29,999	33%
Other Job	2nd Job	36%
	Of those, % of jobs in healthcare	78%
Health Insurance	Provided through employer	45%

The reasons CNAs chose to work as a CNA are provided in Table 9. When asked, "What is the reason you took a direct care work job in the first place?," the most common responses were because they enjoy working with older people, they wanted to help people, they wanted to work in healthcare, the enjoy working directly with people and they felt they could do the job well.

Table 9: Reasons CNAs Chose Direct Care Work in the First Place

Reasons CNAs Chose Direct Care Work in the First Place	
Reason why working as CNA	*% Yes*
I enjoy working with older people	71%
I wanted to help people	68%
I wanted to work in health care	63%
I enjoy working directly with people	61%
I felt I could do the job well	50%
I had experience taking care of a family member	32%
Training was available	30%
I felt it was my personal calling	29%
It was close to home	14%
The schedule	13%
The benefits	11%
The pay rate	10%
It was the only job available	6%
I was not qualified for other types of work	3%
The number of hours	2%

Demographics of Participants and Non-Participants

Whether or not a CNA was participating in a program was based on CNA self-report. In the Program Information and Commitment Questionnaire, CNAs were asked to list all of the programs, awards or incentives that were offered at the facility and list in which of those programs they were participating. Being classified as a participant was based solely on the perceptions of the respondent. If a CNA listed Employee-of-the-Month as a program but did not consider themselves to be a participant because, "you don't participate in the program, they just choose you," then that respondent would not be considered a participant. Some respondents did not perceive themselves as participants in programs or training that was mandatory. In addition, there was a disconnect between what nursing home administrators listed as programs, awards, or incentives and what CNAs listed. All of the administrators surveyed listed at least one program being offered at their facility. However, only 41 out of the 100 CNAs surveyed could identify a program. This was because they were either unaware of the programs being offered or

they knew about them but did not consider them programs (such as employee of the month or parties). There seems to be differing perceptions among CNAs and management staff about what constitutes a program. Management and supervisory staffs' ability to create a culture of shared values and beliefs about programs among CNAs and management staff is imperative for program success.

The demographic characteristics of the two groups are illustrated in Table 10. Non-participants had a slightly higher mean age than participants (38 years old and 34 years old). The two groups were similar on marital status, hours worked per week and pay rate. A larger percentage of non-participants had no children (54% and 43% respectively). A larger percentage of non-participants were black (59% and 38% respectively) but more participants described themselves as "other", most likely because they were Hispanic. Forty-eight percent of participants described themselves as Hispanic compared with 26% of non-participants. The majority of both groups had a high school diploma or GED, or at least some college. A slightly larger percentage of participants had at least some college (40% and 31% respectively) and slightly larger percentage of non-participants had a high school diploma or GED (46% and 33% respectively). Participants reported having a slightly higher household annual income than did non-participants. Forty-seven percent of participants had a second job compared with 32% of non-participants. Sixty-seven percent of participants reported having health insurance while only 35% of non-participants reported having health insurance. Participants and non-participants were significantly different on children younger than 18, race, ethnicity and health insurance.

Table 10: Demographics and Program Participation

T-Test: Demographics and Program Participation				
	Participation	N	Mean	Std. Deviation
Age	Participants	29	34.41	11.71
	Non-Participants	67	38.42	11.17
Sex	Participants	30	.13	.346
	Non-Participants	70	.16	.367
Marital Status	Participants	29	2.48	1.70
	Non-Participants	70	2.70	1.79
Children Younger Than 18	Participants	30	1.43	1.65
	Non-Participants	68	.71	.931
Race	Participants	29	4.45	3.54
	Non-Participants	66	3.03	3.04
Ethnicity	Participants	29	.48	.509
	Non-Participants	69	.26	.442
Education	Participants	30	2.63	.890
	Non-Participants	70	2.79	1.88
Income	Participants	30	3.27	1.26
	Non-Participants	67	3.16	1.33
Hours Worked Per Week	Participants	30	40.10	11.97
	Non-Participants	64	43.18	16.64
Second Job	Participants	30	.47	.507
	Non-Participants	69	.32	.469
Hourly Pay	Participants	23	9.967	.749
	Non-Participants	58	10.06	1.47
Health Insurance	Participants	30	1.67	1.03
	Non-Participants	66	2.29	1.15

	Levene's Test for Equality of Variances		T-Test For Equality of Means		
	F-value	P-value	T-value	Degrees of Freedom	P-value
Age	.110	.741	-1.59	94	.115
Sex	.377	.540	-.303	98	.763
Marital Status	1.34	.250	-.558	97	.578
Children Younger Than 18	19.27	.000+	2.26	37.36	.030*
Race	3.22	.076	1.99	93	.050*
Ethnicity	8.31	.005+	2.05	46.69	.046*
Education	1.82	.180	-.423	98	.673
Income	.005	.943	.356	95	.723
Hours Worked Per Week	3.02	.085	-.909	92	.366
Second Job	4.08	.046+	1.36	51.56	.179
Hourly Pay	8.91	.004+	-.394	73.86	.695
Health Insurance	1.39	.241	-2.54	94	.013*

+ Equal variances not assumed.

* Significant at p<.05.

4.6 Analyses of Survey and Interview Data

I conducted follow-up interviews with five of the seven nursing home administrators who participated in the study. One administrator declined to participate and one administrator could not be located. This administrator had since left the facility and no one at the facility knew where the administrator had gone. I contacted the Texas Department of Aging and Disability Services Nursing Home Administrator Licensure Office and they tried to locate the administrator, but were unable to determine the administrators' current place of employment. The current administrator at that facility was interviewed and provided the information included in the Nursing Home Information section of this dissertation. The administrator was unable to answer any questions about the programs.

During the interviews I asked the administrators to identify the goals of the programs they were offering at their facilities. Almost all of the administrators reported retention as an important goal of the programs. They also talked about letting employees know they are appreciated and supported by facility administration. They wanted to create a positive work environment where employees could increase their education and feel like part of a family. One administrator also stated that it was important for employees to embrace the vision and mission of the facility and for management to communicate effectively to ensure employees know what they are supposed to be doing. Two administrators mentioned resident-centered care, meaning that programs and training were also meant to improve the quality of care provided by CNAs. One administrator stated, "supported employees will provide better care." One administrator had hired a new Assistant Director of Nursing (ADON) since I had finished collecting my data. The new ADON told him that the facility was not doing enough for its employees and has since begun developing new programs at the facility. The administrator was

excited to see the facility was going to address some of the issues I had described during my time at the facility (the importance of good communication between management and staff, offering programs that are beneficial to employees and ensuring the program schedule allows employees to participate.)

I asked the administrators whether they evaluated the effectiveness of their programs or if they gave CNAs an opportunity to provide feedback on existing programs or suggestions for new programs. Two facility administrators conducted an annual employee satisfaction survey. One facility had an outside team come in to administer the survey and the other administered their own survey. The outside team collaborated with the facility to help them set goals to address problems identified from the survey results. The second facility include a comment section at the end of their survey and use this information to make changes based on employee feedback.

In addition to employee satisfaction and retention, facilities are also focused on resident-centered care. To do this, two facilities also looked at quality indicators, measures of resident outcomes, as a way to evaluate program effectiveness. The corporate office of one facility conducted a random sample survey at the facility, but did not ask about programs. One facility administrator said that he observed, but did not collect data in writing.

When asked whether any of the facilities had a staff member whose job it was to develop and run programs for employees, all of the administrators responded that they did not. The responsibility of running programs often fell to the administrator, director of nursing, assistant director of nursing and activity director or a staff development person. This ambiguity about who is in charge of development and planning can lead to disorganization and ineffective programming. This finding is supported by the literature, which states that high quality leadership and management is one organizational practice that leads to lower levels of turnover (Eaton 2003). Eaton was referring to overall

leadership and management of the facility, but high quality leadership and management is also needed in the implementation of programs in order to ensure program success. One facility administrator reported that they would be hiring a nurse educator in 2007. This staff member would be responsible for meeting, greeting and educating employees from the date of their hire and would focus on developing culture change initiatives like career ladders. Because this facility has had high turnover rates, they have had to focus on basic training of new hires and have not been able to move on to higher level skills and additional training that can lead to title changes, merit badges, and additional money. This, I believe, will be a positive change for this facility and will result in positive outcomes for management, employees and residents.

Research Question 1: What kinds of programs are nursing homes offering their nursing assistants to improve work environment? What are nursing homes doing to increase CNA participation in these programs?

To answer *Research Question 1*, I present descriptive statistics from the Program Information and Commitment Questionnaire. I created both a count of programs being offered and categories within which these programs group both of which are provided in Table 11. As I suspected, Austin area nursing homes are each implementing several different types of programs all under the umbrella of, "improving work conditions."

Table 11: Number of Programs Offered at Each Facility

Number of Programs Offered at Each Facility*	
Facility ID	# of Programs
2	9
3	7
8	4
12	2
13	7
16	5
20	3
Total Facilities = 7	Total Respondents = 100

* The number of programs offered is based on administrator responses to the administrator questionnaire.

However, the programs were not as innovative as I had expected. Definition for programs, awards, incentives, training, feedback and policy are provided in Table 12 below. CNAs were given told the definitions of the types of programs with examples when they received the questionnaire.

Table 12: Definitions for Programs, Awards, Incentives, Training, Feedback and Policy

Terms	Definitions
Programs	Any organized activity that is meant to improve CNA perceptions of job quality. *Example: Peer mentor programs or a program that offers money to CNAs who want to continue their education.*
Awards	Activities where a CNA is given something as recognition for a certain behavior. *Example: Awards for attendance or employee of the month.*
Incentives	Can be prizes, gifts, food or money given to CNA to motivate CNAs to improve their performance. *Example: Free meals, holiday or birthday parties, free uniforms or gifts for good performance.*
Training	An activity that is usually mandatory and is used to teach an employee a new skill. *Example: Includes training required by federal legislation or any additional skills a facility might want their employees to develop.*
Feedback	A type of oral or written communication where supervisors, residents, or coworkers can provide information to an employee about their performance. *Example: In this case, most feedback is positive for employees that are high performers.*
Policy	An activity that is a part of how the facility is run as a business. *Example: Including CNAs in the development of the organization's vision and mission or vacation and sick leave.*

Most of the facilities participating in this study were offering some type of incentive such as birthday and holiday parties, drawings or gifts and employee cook outs as well as awards for attendance or performance and employee of the month. The number and types of programs the nursing homes were offering are illustrated in Table 13.

Table 13: Types of Programs Being Offered at Each Facility

Types of Programs Being Offered at Each Facility*						
	Type of Program					
Facility ID	Programs	Awards	Incentives	Training	Feedback	Policy
2	1	2	4	2	0	0
3	0	0	4	0	1	2
8	1	1	1	1	0	0
12	0	2	0	0	0	0
13	1	0	3	1	1	0
16	0	0	2	0	1	1
20	0	1	2	0	0	0
Total	3	6	16	4	3	3

* The number of programs offered is based on administrator responses to the administrator questionnaire.

I ran a frequency on the variable for types of methods nursing homes used to provide information about programs and then counted the types to determine which methods were used most often. CNAs were most likely to learn about programs from their supervisors (administrator, director of nursing or charge nurse) or from postings in the break room and flyers. During the follow-up interviews, administrators most often reported using flyers to inform employees about programs. They also reported providing information about programs during new employee orientation and a few facility administrators used paycheck stuffers. One facility posted a monthly calendar of activities. Another facility provided information during in-service trainings and another reported talking to employees to find out if they were going to attend programs and to provide them with information.

H1: There will be a positive relationship between perceived level of nursing home effort to increase participation and actual CNA participation.

To address H1 I computed a Pearson correlation coefficient to look at the relationship between the question, "On a scale of 1-10, how much effort did the nursing home put into convincing you to participate in these programs, with 1 being no effort and 10 being a lot of effort?" and percent participation, calculated by dividing the number of

programs the CNA participated in by the number of programs identified as being offered by the facility.

There was a positive correlation between perceived level of nursing home effort to increase participation and actual CNA participation. When using only those who were aware of programs (n=41), the correlation (r=.315) was significant at $p < 0.05$. This is a moderate correlation, only explaining 9.92% of the variation between nursing home effort to increase participation and actual CNA participation. This could mean that supervisors' efforts to increase participation are not a reason why CNAs choose to participate in these programs. They could be deciding, on their own, without supervisor influence. Based on the qualitative data it appears that some of the programs were mandatory, therefore CNAs would not be more likely to participate based on nursing home effort to increase participation.

There was very low participation among the certified nursing assistants who participated in the study. Only 41 out of 100 had heard of any programs being offered at their facility and only 30 out of 100 were participating in programs. That means that of the 41 CNAs who knew of programs, 27% chose not to participate. I asked the nursing home administrators what barriers they faced in implementing programs and what barriers they thought their CNAs faced in being able to attend programs. Three of the administrators identified time as a barrier; being able to cover shifts, not having enough time to plan and prepare programs. One administrator reported because the facility had such a high turnover rate, they were always in the training mode and were unable to move on to higher levels skills training or programs to meant to improve CNAs perceptions of their work conditions. Another administrator reported that high turnover and tardiness prevented the facility from offering more programs.

Data on CNA participation is also influenced by differences between administrators and CNAs about what constitutes a program and CNA self-report of

participation in programs. Some CNAs did not see themselves as participants in some programs. For example, CNAs were hesitant to list employee-of-the-month as a program they participate in since an employee is selected and there is not really a formal "program". However, if I asked the CNA whether they actively tried to win employee-of-the-month by showing exemplary work, then some of the CNAs said yes, they did. I would consider these CNAs to be participants but not all of them listed themselves as such.

When asked what the administrators thought were barriers for their CNAs, three administrators reported childcare and balancing personal and professional lives as barriers to CNAs. One administrator also stated many of the CNAs at that facility had two jobs and could not stay after work or come in on days off to participate in programs. This same administrator also reported that the CNAs at the facility were devoted to their jobs and it was sometimes hard for them to pull away from the residents to attend programs. Another administrator also reported CNAs come to the job without adequate training and are not prepared for the realities of the care-giving role. Yet another administrator reported it was possible the facility was not in tune with the things CNAs need and want from programs. One administrator reported that CNAs did not face any barriers and there was no reason why they should not participate and another reported that CNAs had low self-esteem and low levels of education, leaving them unsure of their abilities and hesitant to participate in programs. In collecting data for my Masters thesis, it became clear that some CNAs were not participating in programs because they thought the programs were not meant for them. They thought that leadership or empowerment training was for management staff only because they were not given the opportunity to be leaders and did not feel very empowered. Empowering employees is the responsibility of nursing home managers and supervisors.

Research Question 2: What are nursing homes doing to increase certified nursing assistant commitment in these programs? To what extent are CNA's committed?

To answer *Research Question 2*, I have presented descriptive statistics from the Program Information and Commitment Questionnaire and from the open-ended questionnaire in Part 4 of the data collection instrument. I read the qualitative data numerous times to identify themes in the text and then coded responses accordingly.

To answer part one of research question 2, the answers to the open-ended questions in part 4 of the data collection instrument were coded according to themes identified in the text. For example, I suspected that nursing homes are giving incentives and "talking up" the programs to increase commitment; so statements that fall into the category of "incentives" may be coded as 1 and statements that fall into the category of "word of mouth" may be coded as 2. Three themes emerged from the qualitative data: 1) nursing homes are communicating with their employees about these programs and encouraging them to participate, 2) nursing homes are using positive reinforcement to convince CNAs to participate, and 3) CNAs do not believe the nursing home influenced their commitment to these programs. Some quotes that convey the theme of encouragement are (the number in parentheses following the quote is the respondents ID number. All of the open-ended comments can be found in Appendix B.)

> "They encourage us to participate and explain the importance of enriching ourselves with more knowledge." (35)
>
> "They communicate to us to let us know what is going on, and how we can participate." (39)
>
> "By explaining everything in detail." (21)

Some quotes that support the theme of positive reinforcement are

> "Yes, they show me how important I am at work." (1609)

" They gave me the heart to appreciate what I do." (2005)

"By showing us how important we are, by giving us lunch every week." (312)

Quotes identified as representing the theme of no influence were most often "They didn't".

I asked nursing home administrators what they were doing to convince CNAs programs were worthwhile or to develop commitment. Only one administrator reported not attempting to convince CNAs programs were worthwhile. Another administrator reported asking employees if they were going to attend programs but was discouraged when only about half of employees participated – including some employees who said they would attend but did not. The remainder of the administrators reported using multiple methods of developing commitment. One administrator reported that most of their programs were mandatory, but they were well-done programs with a lot of interaction. The administrator added they offered lots of prizes as incentives for participation. Another administrator reported using mostly communication and actions to convince employees programs were worthwhile. This administrator reported convincing CNAs they were appreciated by talking to them. The administrator said the things one says and how one acts is a large part of convincing employees a program is worthwhile; saying thank you is important as well. A third administrator focused more on showing CNAs the results of programs as a way to convince employees the programs offered were worthwhile. For example, showing CNAs the outcomes from when management tracks programs and showing them the benefits to residents (quality indicators) is one way an administrator attempted to develop commitment to programs. This administrator stated showing CNAs they are responsible for results is key.

To determine the extent to which CNAs are committed to the programs in which they participate, I present the mean, standard deviation, the minimum and the maximum score for questions 10 and 11 from the Program Information and Commitment

Questionnaire are presented in Table 14, along with any additional information regarding reasons for commitment provided on the open-ended section of the questionnaire (Part 4).

The respondents who were participating in programs rated themselves as being relatively committed to the programs. The mean total score was 7.43 with a standard deviation of 2.59. This means that 34.13% of the sample of participants rated their commitment between 4.84 and 10.00. In relation to the range, this is a heterogeneous distribution. Based on responses to the open-ended questions, respondents chose to participate in programs and were committed to them for several reasons, they want to improve their work conditions, they want to improve the care they provide to residents and they want to be involved with the facility. Some examples of comments are:

"Helps me deal with different situations." (805)

"These programs improve my work environment in a way or I feel more relaxed at work." (214)

"It encourages us to do more." (2005)

"I think that it gives motivation to do a better job." (1603)

"It all has to do with making the lives [or the residents] here feel more like home." (21)

"Better prepared, skills and goals." (26)

" I get more knowledge and learn new things to help residents." (35)

"It helped me to meet and know my work co-workers and it gave me more info about the facility and its owners, and how they like to provide care." (218)

Table 14: Mean, Standard Deviation and Minimum/Maximum for Commitment Questions

Mean, Standard Deviation and Minimum/Maximum for Commitment Questions*			
	Mean	SD	Minimum-Maximum
How committed are you to these programs?	6.97	2.85	1-10
How important are these programs to the quality of the work you do each day?	7.90	2.68	1-10
Commitment Total Score	7.43	2.59	1-10

* Only those respondents who were participating in at least one program are included in this analysis, n=30.

H2: There will be a positive relationship between perceived level of nursing home effort to increase commitment and actual CNA commitment.

To address H2, I computed a Pearson correlation coefficient to look at the relationship between the question, "On a scale of 1-10, how much effort did the nursing home put into proving to you that these programs are worthwhile and important, with 1 being no effort and 10 being a lot of effort?" and CNA commitment, by calculating the mean score for, "On a scale of 1-10, how committed are you to these programs (in general), with 1 being not committed at all and 10 being extremely committed?" and "On a scale of 1-10, how important are these programs to the quality of the work you do each day, with 1 being not important at all and 10 being extremely important?"

There was a positive correlation between perceived level of nursing home effort to increase commitment and actual CNA commitment. Two correlations were run using two subgroups, those who new of at least one program but may not have participated in any, and those who knew of programs and participated in at least one. Using the commitment total score, the correlation was significant at $p < 0.01$ for those who knew of at least one program (n=36, r=.473) and those who participated in at least one program (n=30, r=.496). These correlations explain 22.4% and 24.6% of the variation between nursing home effort to increase commitment and actual CNA commitment.

Using the individual commitment question, "On a scale of 1-10, how committed are you to these programs?" the correlations were significant at $p < 0.01$ for those who

knew of at least one program (n=40, r=.494), and $p < 0.05$ for those who participated in at least one program (n=30, r=.429). These correlations explain 24.4% and 18.4% of the variation between nursing home effort to increase CNA commitment and actual CNA commitment to the programs. While these correlations are moderate in strength, these results could mean that supervisors' efforts to increase commitment are not a major reason why CNAs choose to commit to these programs. They could be deciding, without supervisor influence, that these programs are worthwhile. They seem to enjoy their jobs and want to do them well. Based on my previous work with the CNAs who participated in my Masters thesis study, most of the CNAs listened more to what their co-workers said about a program than to what the supervisors said. Perhaps they are relying on peer support.

Research Question 3: What are certified nursing assistant perceptions of their work environment?

To answer *Research Question 3*, I have provided tables that show the frequency, percent, mean and standard deviation for each item in the five work condition questionnaires (empowerment, worker-supervisor relationship, job strain, intent to turnover, and job satisfaction.) The mean, standard deviation, minimum and maximum score are also provided for each work condition total scores in Table 15.

Based on the total score means for the work condition surveys, it appears that the sample has moderate levels of empowerment, good relationships with their supervisors, relatively high levels of job strain, moderate levels of intent to quit and are relatively satisfied with their jobs. There was a lot of variation within this sample, making generalizations about the sample difficult.

CNAs in this study had mixed perceptions of their work conditions and there were no differences between those CNAs who indicated that they were participating in programs and those who were not. A majority of the CNAs were unaware of programs

being offered at the facilities and only 30 CNAs indicated that they were participating in programs. This could mean that facilities are doing other things such as communicating with the CNAs and involving them in the organization or it could mean that CNAs get something else out of their jobs that lead to more positive perceptions of their work conditions. A few of the CNAs I talked to, who did not complete surveys, said that they just wanted to do their jobs. They enjoy being with the residents and get a feeling of accomplishment from their work and are not necessarily committed to the facility itself. However, there is much variation in this sample, making analyses of the date more difficult.

Table 15: Mean, Standard Deviation and Minimum/Maximum Scores for Work Condition Questionnaires

Mean, Standard Deviation and Minimum/Maximum Scores for Work Condition Questionnaires				
	N	Mean	SD	Minimum-Maximum
Empowerment Total Score	85	42.63	8.06	15-60
Worker-Supervisor Relationship Total Score	93	25.49	6.68	9-36
Job Strain Total Score	90	30.14	4.54	18-40
Intent to Quit Total Score	99	7.75	2.31	3-12
Job Satisfaction	99	3.28	1.12	1-5

The frequency, percent, mean and standard deviation for each item within the empowerment questionnaire are provided in Table 16. When studying the individual items in the empowerment questionnaire it appears that respondents tended to agree or strongly agree with the statements that they were responsible for what they did and the results of their actions: "I take responsibility for what I do (97%)." and "I am responsible for the results of my actions (95%)." They more often disagreed or strongly disagreed with the statements that they were involved in the organizational decision-making process, creating organizational goals, or that they were their own boss: "I am my own boss most of the time (23% agreed or strongly agreed), "I am involved in creating

organizational goals for the future (47% agreed or strongly agreed) and I am often involved when changes are planned (46% agreed or strongly agreed). This shows that CNAs do not have strong feelings of control over how they do their jobs or over the future of the organization. CNAs who have more responsibilities and autonomy, or control over how they do their jobs, are more motivated to stay in their jobs (Stone and Weiner 2001). This finding relates directly back to the conceptual framework for this study which states that creating challenging tasks for employees will lead to higher levels of motivation and performance (Isaac, Zerbe and Pitt 2001) as well as increased levels of control over ones own work will lead to increased feelings of personal control (Mirowsky and Ross 2003).

In the open-ended question section of my questionnaire I asked CNAs to identify programs they wished were being offered by the facility. I expected that the CNAs would have many ideas about how to improve their work conditions, including additional programs they wished the facility would offer. However, the CNAs usually could not think of any programs they wished were being offered. When I gave them some examples of programs, they would say, "sure, that would be good" but could not think of any on their own. These responses are indicative of low levels of empowerment. There were also several CNAs who refused to participate in the study. They told me that they only wanted to come to work and do their jobs. They did not want to get involved with the facility. These CNAs were not integrated into the culture of the facility. They were not invested in the vision or mission of the facility other than to provide quality care. This could mean that the facility vision and mission does not include providing a high quality work environment or that these CNAs were unempowered and did not see themselves as part of a family. I would theorize that these employees may be more likely to leave the facility for better pay, better benefits, a more flexible schedule or for a facility closer to home since they are not integrated into the culture of the facility and are

not invested in the future of the facility. However, these CNAs did seem committed to the residents they cared for and so, they might be less willing to leave the facility.

Table 16: Empowerment Questionnaire Results

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	9 (9%)	24 (24%)	51 (51%)	15 (15%)	2.73 (.831)
I am often involved when changes are planned.	23 (23%)	31 (31%)	32 (32%)	14 (14%)	2.37 (.991)
I can be creative in finding solutions to problems on the job.	7 (7%)	13 (13%)	53 (53%)	27 (27%)	3.00 (.829)
I am involved in determining organizational goals.	16 (17%)	32 (33%)	33 (34%)	15 (16%)	2.49 (.951)
I am responsible for the results of my decisions.	8 (8%)	11 (11%)	39 (39%)	42 (42%)	3.15 (.914)
My input is solicited in planning changes.	17 (17%)	26 (26%)	45 (45%)	11 (11%)	2.51 (.908)
I take responsibility for what I do.	2 (2%)	1 (1%)	37 (37%)	60 (60%)	3.55 (.626)
I am responsible for the outcomes of my actions.	1 (1%)	2 (2%)	35 (35%)	60 (60%)	3.57 (.592)
I have a lot of autonomy in my job.	10 (10%)	15 (15%)	58 (59%)	16 (16%)	2.81 (.829)
I am personally responsible for the work I do.	2 (2%)	4 (4%)	37 (38%)	55 (56%)	3.48 (.677)
I am involved in decisions that affect me on the job.	8 (8%)	22 (22%)	42 (43%)	26 (27%)	2.88 (.900)
I make my own decisions about how to do my work.	12 (12%)	21 (21%)	47 (48%)	18 (18%)	2.72 (.906)
I am my own boss most of the time.	34 (34%)	42 (42%)	20 (20%)	3 (3%)	1.92 (.817)
I am involved in creating organizational goals for the future.	26 (26%)	26 (26%)	35 (35%)	12 (12%)	2.33 (1.00)
My ideas and inputs are valued at work.	13 (13%)	29 (29%)	43 (43%)	15 (15%)	2.60 (.899)

Respondents appeared to have positive relationships with their supervisors. The frequency, percent, mean and standard deviation for each item within the worker-supervisor relationship questionnaire are provided in Table 17. They agreed or strongly agreed with the statements, "My supervisor encourages team work (81%)", "My supervisor gives clear instructions (80%)", and "My supervisor gives feedback about their performance (71%)". A little over half of the respondents agreed or strongly agreed that their supervisor gave workers control over how they do their jobs (59%) and gave them control of their daily schedule (54%) showing that these CNAs do not see themselves as having much control over their own jobs. Respondents most often identified the Director of Nursing as their supervisor (51%) and then reported that multiple people were their supervisor (16%) including the nursing home administrator, the director of nursing, the assistant director of nursing and the charge nurse. The frequency distribution of type of supervisor identified by the CNA by facility is provided in Table 18.

I ran a Chi-Square test to measure the association between the CNAs place of employment and the person who the CNA considered to be their supervisor to determine if there were any facility differences in who was most active as supervisor. There was a significant association ($p<.01$). Therefore, I can reject the null hypothesis that there is no association between facility and type of supervisor (Chi-Square value = 50.71, df=30). Different facilities must function under different organizational structures. Some nursing home administrators are more involved in the day-to-day activities of their employees, while other facilities leave supervision to the charge nurse, assistant director of nursing of director of nursing, who are often inadequately trained in supervisory skills.

A one-way ANOVA showed that there is not a significant correlation between who the CNAs consider to be their supervisors and the CNA ratings of their relationship with their supervisor ($F=1.618$, $p=.164$). These results indicate the type of supervisor

does not account for differences in ratings of worker-supervisor relationships. As mentioned above, many supervisors do not have training in management. These positive ratings may result from supervisors who are good communicators and who show respect to their employees, despite limited supervisory training.

Table 17: Worker-Supervisor Relationship Questionnaire

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	10 (10%)	25 (26%)	39 (40%)	24 (25%)	2.79 (.933)
My supervisor is responsive to workers' ideas and concerns.	9 (9%)	28 (28%)	39 (39%)	23 (23%)	2.77 (.913)
My supervisor asks for workers input.	11 (11%)	25 (25%)	40 (40%)	23 (23%)	2.76 (.938)
My supervisor encourages teamwork.	7 (7%)	12 (12%)	51 (53%)	27 (28%)	3.01 (.835)
My supervisor makes good use of workers' knowledge and skills.	7 (7%)	29 (29%)	40 (40%)	23 (23%)	2.80 (.880)
My supervisor gives clear instructions.	7 (7%)	13 (13%)	51 (51%)	29 (29%)	3.02 (.841)
My supervisor gives feedback to workers about their performance.	8 (8%)	20 (20%)	43 (43%)	28 (28%)	2.92 (.900)
My supervisor gives workers control over their daily schedule.	13 (13%)	32 (32%)	39 (39%)	15 (15%)	2.57 (.905)
My supervisor gives workers control over how they do their work.	12 (12%)	29 (29%)	44 (44%)	15 (15%)	2.62 (.885)

Table 18: Who do you consider to be your supervisor?

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
2	0	8	4	1	1	2	**16**
3	2	14	0	1	3	1	**21**
8	0	6	0	0	0	4	**10**
12	3	4	1	1	1	0	**10**
13	2	6	0	3	4	1	**16**
16	0	8	2	0	6	1	**17**
20	1	2	0	1	0	0	**4**
	8 (9%)	**48 (51%)**	**7 (7%)**	**7 (7%)**	**15 (16%)**	**9 (10%)**	**94**

Based on responses to the individual items in the job strain questionnaire it appears that CNAs are experiencing some job strain, but still seem to enjoy their work. The frequency, percent, mean and standard deviation for each item within the job strain questionnaire are provided in Table 19. Eighty-five percent of the respondents agreed or strongly agreed that they felt a sense of accomplishment and competence from their jobs and they have a variety of tasks at work. A majority of the respondents also agreed or strongly agreed with the statements, "This job fits my interests and skills (80%)" and "My work is challenging and stimulating (77%)". Seventy-six percent of the sample agreed or strongly agreed with the statement "I have to deal with emotionally difficult situations at work." Sixty-one percent of the sample agreed or strongly agreed with the statement, "I have too much to do at work." But only a small majority (56%) agreed or strongly agreed that their job takes too much out of them, that they have little chance for the advancement they want or deserve (55%) and they have little opportunity for professional or career development at work (50%). Only 24% of the respondents agreed or strongly agreed that their jobs do not use their skills and only 16% agreed or strongly agreed that their job was dull and lacked variety.

Table 19: Job Strain Questionnaire

Job Strain Questionnaire	Strongly Disagree	Disagree	Agree	Strongly Agree	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	5 (5%)	33 (33%)	44 (44%)	17 (17%)	2.74 (.803)
My job takes too much out of me.	5 (5%)	39 (39%)	41 (41%)	15 (15%)	2.66 (.794)
I have to deal with emotionally difficult situations at work.	1 (1%)	23 (23%)	54 (55%)	21 (21%)	2.96 (.699)
The amount of work I am asked to do is fair.	8 (8%)	28 (28%)	58 (58%)	6 (6%)	2.62 (.722)
I have little chance for the advancement I want or deserve	10 (10%)	34 (34%)	38 (38%)	17 (17%)	2.63 (.887)
My job does not use my skills.	23 (24%)	51 (52%)	19 (19%)	5 (5%)	2.06 (.797)
My job is dull and lacks variety.	27 (28%)	55 (56%)	14 (14%)	2 (2%)	1.91 (.705)
I have limited opportunity for professional or career development at work.	20 (20%)	29 (29%)	40 (40%)	10 (10%)	2.40 (.925)
My work is challenging and stimulating.	4 (4%)	19 (19%)	61 (61%)	16 (16%)	2.89 (.709)
I have a variety of tasks at work.	2 (2%)	13 (13%)	62 (63%)	22 (22%)	3.05 (.660)
I feel a sense of accomplishment and competence from my job.	3 (3%)	12 (12%)	59 (60%)	24 (25%)	3.06 (.701)
This job fits my interests and skills.	5 (5%)	15 (15%)	57 (58%)	22 (22%)	2.97 (.762)
I have the opportunity to learn new things at work.	8 (8%)	26 (26%)	45 (46%)	20 (20%)	2.78 (.864)

It appears that a little less than half of respondents in the study are intending to leave their jobs. The frequency, percent, mean and standard deviation for each item within the intent to quit questionnaire are provided in Table 20. A little less than half of the sample agreed or strongly agreed that they will probably look for a new job in the

next year (47%) and that they often think about quitting (46%), even though 71% of the sample reported that they could find a job with another employer with about the same pay and benefits as they have now.

Table 20: Intent to Turnover Questionnaire

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	17 (17%)	35 (35%)	27 (27%)	20 (20%)	2.51 (1.00)
I often think about quitting.	17 (17%)	37 (37%)	32 (32%)	14 (14%)	2.43 (.935)
I could find a job with another employer with about the same pay and benefits as I have now?	13 (13%)	16 (16%)	47 (47%)	24 (24%)	2.82 (.947)

A little less than half of the respondents were generally very or extremely satisfied with their jobs (46% agreed of strongly agreed). Forty-eight percent of the sample were only somewhat of moderately satisfied with their jobs. Only 5% of the sample reported being not at all satisfied with their jobs. The frequency, percent, mean and standard deviation for the job satisfaction item is provided in Table 21. There is much room for improvement in these ratings.

Table 21: Job Satisfaction Single Item Question

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	5 (5%)	22 (22%)	26 (26%)	32 (32%)	14 (14%)	3.28 (1.12)

There were few significant results in this study and there were several contributing factors. The type of data I was collecting with the questionnaires may not

have gotten at the concepts I was trying to measure. Why a CNA participates in a program, whether or not they choose to commit to that program and how they perceive their work conditions is hard to study with quantitative data. Qualitative data such as interviews, focus groups and observational data may have been illuminated the concepts of interest for this study. This kind of data collection is difficult due to time constraints of facility management and certified nursing assistants. Nursing homes are often understaffed and management and CNAs are overworked. Collecting qualitative data in this environment is difficult and beyond the scope of a doctoral dissertation.

My sample size may have been too small to detect differences between groups. While I had one hundred participants, only thirty of these reported that they were actually participating in programs and therefore were able to answer the commitment questionnaire. The theory behind the commitment questionnaire was flawed because most of the questions were focused towards CNAs who were participating in programs, while not many of the CNAs were participating. During the pilot study, all of the CNAs who participated were aware and were participating in programs. Thus, I did not detect the problem. If a CNA is not participating in a program they cannot be committed. Also, when CNAs who knew of programs but were not participating got to this section of the instrument some of them skipped the questions thinking they were not meant for them. This data would have been better collected through interviews with the CNAs rather than letting the study participants take the survey and complete it on their own.

There was also a large amount of variation within my sample. The CNAs had very different perspectives on their work conditions and even what kinds of programs they thought were needed at the facility. Some of the CNAs wanted to be more involved and thought that more programming would benefit them, while others wanted to do their jobs and be left alone. These CNAs commented that programs were ineffectual and took time away from their daily work and the residents for which they cared. There were no

significant differences between perception of work condition scores within different demographic groups (sex, race/ethnicity, marital status, education and age.) This could be because demographics do not play a role in how CNAs perceive their work conditions. I hypothesize that good communication, positive relationships with supervisors and effective programming have more of an affect on perceptions of work conditions than do demographics.

Facility

There was a statistically significant difference between the means for the worker-supervisor relationship total score. A Bonferroni post hoc test showed that means for the worker-supervisor relationship total score for facility two and facility sixteen are statistically different from facility eight and twelve. The mean score for facility two and sixteen is 28.9 and the mean scores for facility eight and twelve are 20.7 and 20.6. Respondents from facility two and sixteen more often agreed or strongly agreed with the positive statements about their relationships with their supervisors than the other two facilities. The results from the One-Way ANOVA are presented in Table 22.

Table 22: Work Condition Total Scores and Facility ID

One-Way ANOVA: Work Condition Total Scores and Facility ID				
	Facility ID	N	Mean	Standard Deviation
Intent to Quit	2	19	8.16	2.83
	3	21	7.76	2.10
	8	10	8.20	2.35
	12	11	8.55	2.46
	13	18	6.94	2.04
	16	16	7.50	2.00
	20	4	7.00	2.82
Job Strain	2	18	29.17	5.31
	3	19	29.68	5.06
	8	9	30.11	4.91
	12	9	32.11	3.06
	13	16	30.81	4.43
	16	15	30.80	2.83
	20	4	27.25	6.19
Work-Supervisor Relationships Total Score	2	16	28.88	6.76
	3	21	23.90	5.05
	8	10	20.70	5.56
	12	9	20.56	8.03
	13	17	26.06	6.75
	16	16	28.88	5.67
	20	4	27.50	1.92
Job Satisfaction	2	19	3.26	1.24
	3	21	3.38	1.28
	8	10	3.40	.843
	12	10	2.50	1.08
	13	18	3.44	1.20
	16	17	3.29	.722
	20	4	3.75	.957
Empowerment	2	16	41.56	10.65
	3	21	43.95	7.15
	8	9	40.11	6.62
	12	6	36.67	7.03
	13	16	44.00	9.00
	16	15	44.20	5.56
	20	3	43.33	8.74

		df	F-Value	P-Value
Intent to Quit	Between Groups Within Groups	6 92	.834	.546
Job Strain	Between Groups Within Groups	6 83	.826	.553
Work-Supervisor Relationships Total Score	Between Groups Within Groups	6 86	3.97***	.001
Job Satisfaction	Between Groups Within Groups	6 92	1.05	.399
Empowerment	Between Groups Within Groups	6 79	1.01	.423

*** Significant at p<.001.

The worker-supervisor relationship questionnaire items solicited information about communication between employees and supervisors. Based on a follow-up interview with the administrator at facility two, it seems that this facility places a strong emphasis on communication and ensuring that the CNAs at this facility know what the mission and vision of the facility is and what they need to do to do their jobs well. This administrator also seemed to recognize difficulties many CNAs face in their personal and professional lives such as single parenthood and working two jobs. The literature supports the theory that good communication is key to improving CNA perceptions of their work conditions. Good communication between supervisors and employees is a significant factor in organizational effectiveness and clear lines of communication may positively affects levels of job satisfaction (Kim 2002). I was unable to complete a follow-up interview with the administrator from facility sixteen. The administrator had since left the facility and the Texas Department of Aging and Disability Services Office of Nursing Home Administrator Licensure was unable to locate the administrators' current place of employment.

The administrators from facilities eight and twelve had different points of view from the administrator from facility two. The administrator at facility eight reported wanting to create a work environment where employees felt appreciated and supported.

The administrator was focused on resident-centered care and resident outcomes, as are most nursing home administrators. However, I think that it is also important to focus on employee satisfaction. The literature shows when CNA job quality improves, quality of resident care improves (Mickus et al. 2004). When trying to improve employee satisfaction and job quality, it is not sufficient to focus only on training meant to improve resident care. It is also necessary to place significant importance on employee satisfaction and job quality; to focus on employees lives inside and outside of their jobs as caregivers.

When asked what the administrators thought was the solution to improving CNAs perceptions of their work conditions the administrator from facility two reported that communication was key. This administrator stated that employees want to feel "in on things", they want to have access to information and to supervisors and they want to know what is going on at the facility. The administrator from facility eight reported they were unsure of a solution. This administrator stated that it was likely very few CNAs became CNAs because it was the "end all". The administrator thought most CNAs were working only until they could find a new job and that a very small percentage worked as CNAs because they loved it. This actually goes against what many CNAs in this study reported as the reason they became CNAs. A majority of the sample reported they enjoyed working with older people, they wanted to help people, they wanted to work in healthcare and they enjoyed working directly with people. The literature supports the idea that many CNAs feel that their work is a "calling", that they were meant to do this work. The administrator from facility twelve reported that increased pay and benefits was the answer. This administrator was very concerned about the Medicaid reimbursement rates and stated that if reimbursements were increased he/she would be able to increase pay and provide benefits (health insurance, vacation and sick leave) for employees. Pay and benefits is a very important part of the recruitment and retention

discussion but it is not the only thing that will positively impact employee perceptions of work conditions. The CNAs in this study did identify wages and benefits as significant contributors to their job satisfaction. But in the absence of better wages and benefits, research has shown that good communication between employees and supervisors, gestures of appreciation and respect from management staff and giving CNAs increased responsibility and a voice in the facility are also successful in improving perceptions of work conditions.

The administrators from the other two facilities reported showing employees respect and support, making their work meaningful, instilling areas in which they can feel proud and providing areas for growth are also strategies, in the absence of pay and benefits, to improve CNAs perceptions of their work conditions. Another component to this discussion is management training. A charge nurse is most often who a CNA reports to on a day-to-day basis. According to the Texas Board of Nurse Examiners, a charge nurse is most often a licensed vocational nurse (LVN), requiring a minimum of 1,398 clock hours: 558 hours for classroom instruction and 840 hours for clinical practice, who has almost no training in management and supervisory skills. Most registered nurses (RNs) also have had very little or no training in management and supervisory skills. Conflict and poor supervision often becomes a problem when LVNs and RNs are hired into management positions, for which they are inadequately trained, and required to supervise many CNAs.

Research Question 4: What is the role of commitment in the relationship between program participation and perceived work environments?

All of the nursing home administrators interviewed as part of the follow-up to the study agreed that commitment was an important part of program success. Two administrators reported that CNAs who were committed to programs tried harder and were more committed to doing a good job. One administrator reported that complete

buy-in is needed for a program to be successful and another administrator thought that buy-in enabled CNAs to understand why they are participating or what the purpose is of the program. Buy-in is a catch phrase for commitment; it means that someone believes something is worthwhile and shares the vision and mission of the program or the facility as a whole. Another administrator stated that commitment is something internal and is hard to teach.

H3: Participants will have more positive perceptions of their work conditions than non-participants.

There was a significant but unimportant difference between the means for job strain for participants and non-participants. The results of the T-Test are provided in Table 23. Based on a comparison of the means, participants scored two points lower on levels of job strain than did not-participants which is a significant difference but may not be an important one. This is a small finding in support of my hypothesis that participants will have more positive perceptions of their work conditions than non-participants. The goals of most programs are to decrease turnover. There are several factors that can affect the likelihood that a CNA will leave their job, one of which is job strain. Programs that teach CNAs how to deal with job strain will most likely lead to lower levels of turnover. In addition, being part of a group or team and participating in programs that may not focus specifically on job strain can often have the same positive affect.

Table 23: Work Condition Total Scores and Participation

T-Test Work Condition Total Scores and Participation				
	Participation	N	Mean	Std. Deviation
Job Satisfaction	Participant	30	3.57	1.01
	Non-Participant	69	3.16	1.15
Empowerment Total Score	Participant	26	44.73	7.16
	Non-Participant	60	41.72	8.31
Work-Supervisor Relationships Total Score	Participant	27	27.30	6.67
	Non-Participant	66	24.76	6.59
Job Strain	Participant	30	28.63	5.28
	Non-Participant	60	30.90	3.95
Intent to Quit	Participant	30	7.30	2.63

	Non-Participant	60	7.04	2.15

	Levene's Test for Equality of Variances		T-Test For Equality of Means		
	F-value	P-value	T-value	Degrees of Freedom	P-value
Job Satisfaction	1.23	.270	1.68	97	.095
Empowerment Total Score	.112	.739	1.61	84	.112
Worker-Supervisor Relationships Total Score	.008	.929	1.68	91	.096
Job Strain	2.87	.094	-2.29*	88	.025
Intent to Quit	1.85	.177	-1.27	97	.206

* Significant at p<.05.

H4: There will be a positive relationship between commitment and CNA perceptions of their work conditions.

I computed a Pearson correlation coefficient to address H4 and the results are illustrated in Table 24. Worker-supervisor relationship was the only work condition score that was significantly correlated with commitment. There was a positive relationship between commitment and CNAs perceptions of their relationship with their supervisor. The worker-supervisor relationship is an important component of general work conditions. Supervisors are responsible for informing CNAs about programs available to them and convincing CNAs programs are worthwhile. It would make sense then, that as CNAs perceptions of the relationship with their supervisor improve, their levels of commitment to programs would also improve. This finding supports the theory that management/supervisory staff are responsible for establishing employee buy-in to programs and ensuring that employees believe in the goals of programs and of the vision and mission of the facility as a whole.

Table 24: Work Condition Total Scores and Commitment

Pearson Correlation: Work Condition Total Scores and Commitment			
	N	Pearson Correlation	P-Value
Job Satisfaction	30	.075	.695
Empowerment	26	.170	.405
Work-Supervisor Relationships Total Score	27	.535**	.004
Job Strain	30	-.130	.492
Intent to Quit	30	-.207	.272

** Significant at p<.01

This chapter included a discussion of how I chose my sample size, designed my data collection instrument, how I chose the facilities from which I would collect data and how I recruited CNA respondents. I also discussed of the results of analyses of the data. The main findings of this study were that nursing homes were not effectively implementing programs to improve CNA perceptions of work conditions. Most of the nursing homes were offering some kind of incentive or award program, but they were not advertising or promoting the programs effectively, there was ambiguity about who was in charge of program planning and development and there was no evaluation of program success. There was a disconnect between what programs administrators said the facility was offering and what CNAs reported. Only 30 CNAs indicated that they were participating in programs and there was quite a bit of variation in the self-reported levels of program commitment among these CNAs. CNA perceptions of their work conditions were, for the most part, positive. However, there were large standard deviations for most of the questionnaire items leading me to believe that improved program implementation would result in more CNA commitment to programs and improved CNA perceptions of work conditions. What is of most interest is that nursing homes were unaware of the resources available to them. There is a growing amount of information about evidence-based best practices in recruitment and retention of CNAs. The nursing home administrators in this study did not know about these reports and did not know what

organizations and institutions were collecting data in this area. For this reason, I have put together a packet of information for the facilities that includes a double-sided page with links to organizations conducting research in the area, a list of articles available for free on the web, "how to" articles providing information on how to create a peer mentor program or a career ladder, articles on organizational commitment from peer-reviewed journals that nursing home administrators may not have available to them, articles on culture change in long-term care and pamphlets from programs that have a proven evidence base for success. By providing this information, I am hoping that these facilities can begin developing more effective programs to improve work conditions for their CNAs.

Chapter 5: Discussion

In previous chapters I have provided the introduction, research questions and hypotheses, and conceptual framework for the dissertation; background and significance of the study; reviewed the relevant literature and described the results of the study. This chapter is a discussion of those results and how they relate to the conceptual framework and previous research. Study limitations are included in this chapter as well as recommendations for future data collection, nursing home administrators and staff, and general recommendations for organizations conducting research in the area and Austin area nursing homes. Policy implications of the study are described at the end of the chapter.

5.1 Research Questions

Nursing home administrators were implementing programs in an effort to retain their CNAs and to show appreciation and support to their employees. Some facilities were evaluating the effectiveness and success of their programs, but the data collected were insufficient and some facilities did not collect data at all. Only one facility seemed to use data collected to make changes to how the facility functioned. Some facilities were using resident outcomes as measures of program success. While a nursing homes main purpose is to provide high quality care to its residents, it is also a business and needs to provide high quality work conditions for its employees.

None of the facilities had a staff member whose job it was to develop, plan and implement programs. The administrator, director of nursing and charge nurse most often took responsibility for these tasks. Having multiple staff members working on these programs can sometimes lead to ambiguity about who is in charge of development and planning and can lead to disorganization and ineffective programming. One nursing home will be hiring just such a person in 2007. Having one staff person, with the

appropriate training and skills, in charge of program planning and implementation will lead to better programs and better participation. This will also lead to more positive outcomes for management, employees and residents.

I. What kinds of programs are nursing homes offering their nursing assistants to improve work environment? What are nursing homes doing to increase CNA participation in these programs?

The nursing homes administrators who participated in this study were offering between two and nine programs to their CNAs. Nursing homes were offering mostly incentive programs to their employees such as free meals, holiday and birthday parties and free uniforms or gifts for good performance. Awards such as employee of the month or prizes for good attendance, were also common.

CNAs reported learning about programs from their supervisors (administrators, directors of nursing or charge nurses) or from postings in the break room and flyers. Administrators reported using flyers, new employee orientation, monthly calendars, in-service training and paycheck stuffers were methods for advertising programs to increase participation.

H1: There will be a positive relationship between perceived level of nursing home effort to increase participation and actual CNA participation.

There was a moderate, positive relationship between perceived level of nursing home effort to increase participation and actual CNA participation. This could mean that supervisors' efforts to increase participation were having some affect but were not the only reason why CNAs chose to participate in programs. CNAs may have decided to participate on their own or they may have depended on co-worker feedback or influence. Some of the CNAs in my Masters thesis study attended programs because their co-workers had convinced them to attend.

Only 30 CNAs out of 100 in the study reported that they were participating in programs. Nursing home administrators identified time as a large barrier to program planning and implementation. It is difficult to schedule programs around work schedules and it is also hard to find the time to plan and prepare when there is not a staff position assigned to this responsibility. The administrators identified several barriers to CNA participation: childcare, balancing personal and professional lives and working two jobs. One administrator also mentioned that CNAs were committed to their jobs and it was hard for them to take time away and leave their care-giving responsibilities. However, another administrator thought that low self-esteem and low levels of education accounted for poor participation among CNAs. Some CNAs may choose not to participate in programs because they doubt their abilities, but it is the responsibility of the nursing home to build self-esteem and convince or educate employees on the benefits of program participation.

II. What are nursing homes doing to increase certified nursing assistant commitment in these programs? Are CNAs committed?

Three themes emerged when studying the qualitative data provided by CNAs about what nursing homes are doing to increase CNA commitment in programs 1) nursing homes are communicating with their employees about programs and encouraging them to participate, 2) nursing homes are using positive reinforcement to convince CNAs to participate and 3) CNAs do not believe the nursing home influenced their decision to commit to these programs.

Nursing home administrators reported communicating with employees and encouraging them to participate and using positive reinforcement (prizes) to convince CNAs to participate. One administrator used quality indicators to show CNAs the affect of the programs on resident outcomes.

Respondents participating in programs indicated they were relatively committed to programs. The mean total score was 7.43 with a standard deviation of 2.59. Base on qualitative data, study participants chose to participate and commit to programs for several reasons. They wanted to improve their work conditions, improve the care they provide to residents and be more involved with the facility.

H2: There will be a positive relationship between perceived level of nursing home effort to increase commitment and actual CNA commitment.

There was a positive relationship between perceived level of nursing home effort to increase commitment and actual CNA commitment. The correlations were of moderate strength explaining approximately 22% to 24% of the variation, depending on the sub-sample used. These results could mean that supervisors' efforts to increase commitment are not a major reason why CNAs choose to commit to programs. They could be deciding, without supervisor influence, that these programs are worthwhile. They seem to enjoy their jobs and want to provide quality care to the residents. Based on previous work with the CNAs from my Masters thesis study, many CNAs depended on co-worker feedback rather than supervisor influence. In this case, peer support may be a more important factor than nursing home effort.

III. What are certified nursing assistant perceptions of their work conditions?

CNAs appear to have relatively mixed perceptions of their work conditions. In the absence of programs, facilities could be using other strategies to improve CNA perceptions of their work conditions such as communicating with CNAs and involving them in the organization, or it could mean that CNAs are getting something else out of their jobs leading to more positive perceptions of their work conditions. A few of the CNAs I talked to, who did not complete surveys, said they just wanted to do their jobs. It

is likely the relationships built with the residents CNAs care for make their jobs more rewarding.

CNAs were experiencing

- moderate levels of empowerment,
- relatively positive relationships with their supervisors,
- moderate levels of job strain (although they still seem to enjoy their jobs),
- moderate levels of intent to quit (less than half reported that they intended to look for another job in the next year or that they often thought about quitting, but a majority said they could find another job with the same pay and benefits), and
- moderate levels of job satisfaction.

The mean scores for worker-supervisor relationship were significantly different within the facility variable. The mean scores for facility two (28.9) and sixteen (28.9) were significantly different from the mean scores for facility eight (20.7) and twelve (20.6.) Higher scores indicate more positive relationships with supervisors. Based on administrator follow-up interviews, the administrator at facility two places a strong emphasis on communication between employees and supervisors and ensuring employees know what the mission and vision of the facility is and what each employee needs to be doing. I was unable to complete a follow-up interview with the administrator from facility sixteen. The administrator at facility eight was much more focused on resident outcomes. I agree that resident outcomes are the ultimate measure of a nursing homes ability to provide quality care to its residents, I also think that nursing homes need to focus on the needs of their CNAs. The administrator from facility twelve was very worried about Medicaid reimbursement rate and did not place much emphasis on program planning and preparation or program success.

When I asked the administrators what they thought the solution was to improving CNAs perceptions of their work conditions I got a variety of answers. Several administrators reported without good communication between employees and supervisors, employees perceptions of work conditions would not improve. Access to information and to supervisors was also mentioned as well as involving CNAs in what is going on at the facility. One administrator said increased pay and benefits was the solution while another administrator reported the reason CNAs have negative perceptions of their work conditions was because they have low self-esteem, are uneducated and do not think of their job as ideal. Nursing homes should take responsibility for their employees. If a nursing home wants to build a high quality workforce to provide continuous quality care to facility residents, then they must invest in their employees. This means offering programs to build self-esteem and feelings of empowerment, team building and leadership classes and allowing CNAs to take on more responsibility in resident care and participate in care planning.

IV. What is the role of commitment in the relationship between program participation and perceived work conditions?

All of the administrators agreed that commitment played a part in the relationship between program participation and program success. A successful program would improve CNAs perceptions of their work conditions. Administrators reported that committed employees tried harder and were committed to doing a good job. Two administrators talked about the importance of employee buy-in, not only to a specific program but also to the mission and vision of the facility, in the success of a program or nursing home.

H3: Participants will have more positive perceptions of their work conditions than non-participants.

There was a significant difference between the means for job strain for participants and non-participants. Based on a comparison of the means, participants had slightly lower levels of job strain. This supports my hypothesis that participants will have more positive perceptions of their work conditions than non-participants. While analyses of the other work condition scores did not result in significant differences, the significant difference between the job strain scores tells me that programs have an impact on CNAs levels of job strain. Many programs are meant to support employees and to make them feel like they have the tools to do their jobs well. When an employee feels support and adequately trained, I suspect, perceptions of job strain decrease. There is less worry and stress involved when you know what you are doing and that the facility is there to support you.

H4: There will be a positive relationship between commitment and CNA perceptions of their work conditions.

There was a significant positive relationship between commitment and CNA perceptions of their relationship with their supervisor. As discussed under research question 3, the worker-supervisor relationship is an important one. This relationship can provide CNAs with valuable knowledge about their job responsibilities and also allow them to provide their supervisors with feedback. A positive worker-supervisor is one where the CNA feels supported by their supervisor and feels confident enough to tell their supervisor what they need, and the supervisor respects their employees enough to include them in the decision-making process.

Nursing homes in my sample were offering a variety of programs. There was no organized effort on behalf of nursing home management to develop new programs or improve existing ones or to increase participation. Nursing home effort to increase

participation was positively correlated with actual CNA participation, but only 30 CNAs from the sample were participating in programs and only 41 CNAs actually knew of any programs being offered. These results indicate more effort is needed to increase participation.

There was also no organized effort on behalf of nursing home management to increase or develop program commitment among CNAs participating in programs. Despite this, the CNAs participating in programs were moderately committed and there was a positive relationship between nursing home effort to increase program commitment and actual CNA commitment. These results indicate more effort is needed to develop program commitment.

In the absence of programs, certified nursing assistants in the sample still had relatively positive perceptions of their work conditions. There was however, quite a bit of variation within the sample leading me to conclude that more and better programs, along with increased effort to improve participation and develop program commitment, would have a positive impact on perceptions of work conditions.

I was unable to determine the role of program commitment in the relationship between program participation and perceived work conditions. It is a widely held belief that organizational commitment, commitment to a job, is an important contributor to an organizations' success. It would make sense then, the same would hold true for a specific programs success. I still hypothesize that program commitment moderates the relationship between program participation and CNA perceptions of work conditions.

In the absence of effective programs, why would CNAs stay in their current positions? There are several possible answers to this question. If the job offers sufficient pay and benefits then the CNA would not gain anything from moving to a new facility. About a third of the CNAs participating in this study said that they could find a job with similar pay and benefits as their job now. But if the pay and benefits are approximately

the same, then it may not be worth it to change jobs. The facility may have good leadership in place. They may have an administrator, a director of nursing or charge nurses who are good communicators and show respect to their CNAs. Research has shown that good communication and respect from supervisors are important to CNAs. CNAs choose this profession because they enjoy working with older people and they want to help people. Even if there were no programs being offered to CNAs to help improve their perceptions of their work conditions, a CNA may stay at a facility where they have developed relationships with the residents they are for. I think that in addition to sufficient pay and benefits, positive leadership, and relationships with residents it is imperative that nursing facilities develop programs that tie the CNA to the facility and create a sense of family. It is always nice to have a job where you know you are appreciated and supported, and you have opportunities to grow, take on new responsibilities and learn new skills. Programs such as peer mentor programs, self-managed work teams, career ladders, family-caregiver communication initiatives and others are good ways to create a positive work environment and create a culture of caring for not only the residents but for staff as well.

5.2 LIMITATIONS

Only 30 CNAs out of 100 reported that they were participating in programs and only 41 out of 100 could identify any programs being offered by the facility. (This could be because they did not consider something to be a program, like employee-of-the-month.) CNAs who were not participating in programs could not answer the commitment questions on the program information and commitment questionnaire. I did not have enough power to detect significant differences within the participant group because I only had 30 CNAs in this sub-sample. I did not have enough power to detect differences within this group. There was also a flaw in how I conceptualized commitment. I did not realize, prior to data collection, that non-participants would not be

answering the commitment questions (if you are not participating in a program you cannot be committed to it.) This limited my ability to analyze the data and I was unable to run a regression to study how commitment moderates the relationship between program commitment and perceptions of work conditions as I had planned.

There was also a large amount of variation within my sample. While the CNAs reported relatively positive perceptions of their work conditions, standard deviations indicated that the sample was not particularly homogeneous. If the facilities were effectively implementing interventions designed to improve CNA perceptions of work conditions, then one would expect the responses to be more homogeneous. The heterogeneity of the sample may have contributed to the lack of significant findings.

I wanted to study CNA commitment to the programs in which they participate. I also wanted to study how nursing home management developed these programs, how they convince CNAs to participate and how they convince them that programs are worthwhile. I wanted to then study how commitment moderated the relationship between participation and perceptions of work conditions. It became apparent that there could be a reciprocal relationship between program participation and perceptions of work conditions. This relationship was discussed in the conceptual framework section. I assumed that it was program participation that positively influenced perceptions of work conditions. However, it could also be true that CNAs who participate in programs choose to do so because they already have positive perceptions of their work conditions and those who have more negative perceptions choose not to participate.

The kind of data I needed to understand and analyze these concepts was not best collected through the use of survey instruments. My data would have been richer and more detailed had I collected qualitative data through interviews and focus groups with CNAs and management. However, a nursing home setting is not conducive to this type of data collection. CNAs and supervisors are very busy and do not have time to leave

their work to participate in in-depth interviews or focus groups. It was difficult for CNAs to find the time to complete a questionnaire that took only 20 minutes to complete. They had to be willing to complete it during their lunch break or rush through it during a morning or afternoon break. Some of the CNAs also took the questionnaire and tried to fill it out during small breaks they may have throughout the day. These breaks were often few and far between.

5.3 RECOMMENDATIONS

Data Collection

- Qualitative data should be collected on program planning and implementation, program participation, program commitment, and perceptions of work conditions. These data should consist of interviews and focus groups with CNAs, nursing home administrators, directors and assistant directors of nursing, charge nurses and other staff members involved in program planning and implementation.
- Pre-existing data should also be collected on how programs are developed, program goals, program attendance and participant feedback (if available.)

Nursing Home Specific Recommendations

- Nursing home administrators, or those in charge of program implementation, should evaluate programs from development stages to implementation and completion. Program evaluations can consist of
    - Process evaluations – understanding how the program really works or how it produces the results that it does
    - Outcome evaluations – measuring the effects of the program on participants

- Needs assessment – determining what the population you are trying to serve really needs
- Formative evaluation – conducted during development of a program
- Summative evaluation – done at the conclusion of a program

❖ Nursing home administrators should calculate turnover rates for all employees. It would also be beneficial to keep records of how many applications for certified nursing assistant positions are received each year, how many certified nursing assistants are hired and how many leave the facility. This kind of information would make it possible to study trends in who applies for CNA positions, who gets hired and who leaves.

❖ Any nursing home employee who is responsible for supervising others should be required to participate in some kind of supervisory training. The results from this study indicate that positive worker-supervisor relationships positively affect CNA perceptions of their work conditions.

❖ It is also recommended that nursing home staff review current research on recruitment and retention to assist them in developing more innovative and dynamic programs for their employees (a packet with suggested readings and links to organizations conducting research in this area will be provided to all nursing home administrators.) These programs should also be designed to integrate the CNA into the culture of the facility.

❖ Nursing homes should hire a program coordinator who would be responsible for program planning and implementation. This staff member could also be responsible for evaluation of programs. A desirable candidate would have experience in employee relations (human resources), program development and program evaluation.

General Recommendations

- A study should be done on developing a network of nursing homes in the Austin area that can support each other and share information about program successes and failures and to develop best practices.
- Organizations conducting research in the area of recruitment and retention of direct-care workers should study and develop ways to encourage diffusion of knowledge to the greater nursing home population and develop an evidence-base from which nursing homes can draw. This would include information about programs that have been found to be successful in retaining CNAs and steps to follow if a nursing home chooses to implement a program.

5.4 POLICY IMPLICATIONS

In the circle of researchers doing work in this area, translating research into practice is a new 'hot topic'. I have determined that there has not been a diffusion of research knowledge down to individual nursing homes that would benefit most from the findings. With these findings, researchers and leaders in the field of long-term care can take steps to educate the nursing homes about what resources are available to them and how to implement culture change in their own facilities.

As described earlier in this dissertation, culture change is the process that nursing homes go through when trying to change the way the organization operates so that they may provide better quality care to their residents and a better work environment for their employees. Culture change involves implementing programs to improve CNA perceptions of work conditions, providing training to supervisors and staff on effective communication, involving CNAs in resident care planning and in development of the facility vision and mission as well as focusing on resident-centered care, or providing care that preserves the dignity and quality of life of nursing homes residents. Culture

change in long-term care is important because nursing homes are responsible for the quality of life of a large, vulnerable segment of our population. It is imperative that these facilities provide the highest quality care, and to do this they must create a workplace culture where those providing the majority of hands-on care to residents are valued and respected.

Another more macro aspect of culture change is focusing on perceptions of nursing homes as unpleasant places to live and work. Older adults are undervalued in our society. Nursing homes are often a place where the sick and old are left and ignored and those who commit their lives to caring for these people are undervalued as well (Stone and Weiner 2001). Direct care work is a noble profession and we should be encouraging people who have an empathetic character to pursue work in this field.

The bigger picture here is that we want to improve the quality of life of residents living in nursing homes. Research has shown that improving quality of resident care can improve resident quality of life. To improve quality of resident care one must improve the job quality of those providing the majority of hands-on care, the CNAs (Mickus et al. 2004; Health Resources & Services Administration 2004). Job quality can be improved with high quality leadership and management, a practice of valuing and respecting direct care workers, increased wages and benefits, effective communication skills between supervisors and employees, adequate staff-to-resident ratios, increased opportunities for training and career development and added responsibilities and autonomy for CNAs.

Legislative policy can affect the above factors. Costs are controlled through holding down rate reimbursement to nursing homes. Medicaid reimbursement rates to nursing homes have been cut recently and will continue to decline, limiting the ability of nursing homes to keep adequate staff-to-resident ratios and also limiting their ability to provide adequate wages and benefits.

This chapter included a discussion of the findings and limitations of this study, a list of recommendations for further research, for individual nursing homes and general recommendations for practice and a discussion of policy implications. Nursing homes were not effectively implementing programs to improve CNA perceptions of work conditions and there was a disconnect between what programs administrators and CNA perceptions of what is considered a program. Thirty CNAs indicated that they were participating in programs and reported varying levels of program commitment. CNA perceptions of their work conditions were, for the most part, positive. However, there were large standard deviations for most of the questionnaire items leading me to believe that improved program implementation would result in more CNA commitment to programs and improved CNA perceptions of work conditions.

The most important finding is that nursing homes were unaware of the resources available to them. There is a growing amount of information about evidence-based best practices in recruitment and retention of CNAs. The nursing home administrators in this study did not know about these reports and did not know what organizations and institutions were collecting data in this area. I have assembled a packet of information for the facilities that includes a double-sided page with links to organizations conducting research in the area, a list of articles available for free on the web, "how to" articles providing information on how to create a peer mentor program or a career ladder, articles on organizational commitment from peer-reviewed journals that nursing home administrators may not have available to them, articles on culture change in long-term care and pamphlets from programs that have a proven evidence base for success. By providing this information, I am hoping that these facilities can begin developing more effective programs to improve work conditions for their CNAs.

Chapter 7: Conclusion

Survey data was collected from 100 certified nursing assistants from seven nursing homes in the Austin area. The survey instrument consisted of four parts soliciting information about CNA demographics, program information and levels of commitment, perceptions of work conditions (empowerment, worker-supervisor relationship, job strain, intent to turnover and job satisfaction) and open-ended questions. Follow-up interviews were conducted with nursing home administrators to gain additional insight into

- How nursing homes operate.
- How they develop, prepare and implement programs.
- What kinds of barriers administrators face when developing and implementing programs and what barriers CNAs face when trying to participate in programs.
- The role of commitment in program success.
- Administrators' thoughts on the solution to improving CNA job satisfaction.

While the nursing homes in my sample were offering a variety of programs, there was no organized effort to develop and implement programs, increase participation and commitment or evaluate program effectiveness. All of this is hard to do in a setting where both managers and employees are overworked and high turnover is prevalent, not only among CNAs but among management staff as well. While this study did not conclude that program commitment moderates the relationship between program participation and CNA perceptions of work conditions, research has shown that innovative programming can have a positive impact on employee satisfaction and job performance. Organizational commitment literature suggests commitment contributes to

organizational success and I theorize that the same would be true for program commitment and program success. Nursing facilities would benefit from creating organizational cultures that provide appropriate challenges and support for CNAs, provide rewards that are in-line with performance, establish trust between supervisors and CNAs, and provide programs and rewards that are in tune with CNA needs and wants (Isaac, Zerbe and Pitt 2001). CNAs would have more positive perceptions of their working conditions is they were given more control over how they do their jobs, given more leadership opportunities, given the resources they need to do their jobs well, and were supported by their supervisors particularly when the facility is understaffed and CNAs are overworked (Mirowsky and Ross 2003). If managers of nursing facilities and supervisors worked to better motivate their employees and gave them more control of their work then CNAs would be more committed to the organization. It is important that CNAs share the same values and goals as does the organization and are willing to work towards those goals on behalf of the organization. Commitment is influenced by the quality of employee experiences within an organization. If nursing facilities could implement some of the concepts illustrated in Vroom's Expectancy theory and Mirowsky and Ross' theory of Alienation CNAs would become more committed to the facilities and their perceptions of work conditions would likely improve.

Nursing homes should offer well-organized programs to support their employees. To do this, an evidence base needs to be established from which facilities can draw. Nursing homes would benefit from a network of nursing homes in the Austin area to discuss successes and barriers in program implementation. There is much work being done to learn more about how to develop and maintain a qualified direct-care workforce. Nursing homes in this study were largely unaware of work bring done in this area. More effort should be made on the part of both nursing homes and research organizations to make this research common knowledge.

Appendix A. Work Condition Item Scores

Table 25: Facility Two – Empowerment Questionnaire Item Scores, n=19

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	2 (11%)	6 (32%)	8 (42%)	3 (16%)	2.63 (.895)
I am often involved when changes are planned.	6 (32%)	4 (21%)	7 (37%)	2 (11%)	2.26 (1.05)
I can be creative in finding solutions to problems on the job.	1 (5%)	1 (5%)	10 (53%)	7 (37%)	3.21 (.787)
I am involved in determining organizational goals.	4 (22%)	5 (28%)	6 (33%)	3 (17%)	2.44 (1.04)
I am responsible for the results of my decisions.	1 (5%)	1 (5%)	7 (37%)	10 (53%)	3.37 (.831)
My input is solicited in planning changes.	3 (16%)	3 (16%)	12 (63%)	1 (5%)	2.58 (.838)
I take responsibility for what I do.	1 (5%)	0 (0%)	7 (37%)	11 (58%)	3.47 (.772)
I am responsible for the outcomes of my actions.	1 (5%)	1 (5%)	4 (21%)	13 (68%)	3.53 (.841)
I have a lot of autonomy in my job.	1 (6%)	1 (6%)	14 (78%)	2 (11%)	2.94 (.639)
I am personally responsible for the work I do.	1 (6%)	2 (11%)	6 (33%)	9 (50%)	3.28 (.895)
I am involved in decisions that affect me on the job.	3 (16%)	3 (16%)	9 (47%)	4 (21%)	2.74 (.991)
I make my own decisions about how to do my work.	2 (11%)	6 (33%)	5 (28%)	5 (28%)	2.72 (1.02)
I am my own boss most of the time.	7 (37%)	9 (47%)	2 (11%)	1 (5%)	1.84 (.834)
I am involved in creating organizational goals for the future.	6 (32%)	3 (16%)	8 (42%)	2 (11%)	2.32 (1.06)
My ideas and inputs are valued at work.	4 (21%)	3 (16%)	10 (53%)	2 (11%)	2.53 (.964)

Table 26: Facility Two – Worker-Supervisor Relationships Item Scores, n=19

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	2 (11%)	0 (0%)	10 (53%)	7 (37%)	3.16 (.898)
My supervisor is responsive to workers' ideas and concerns.	2 (11%)	3 (16%)	8 (42%)	6 (32%)	2.95 (.970)
My supervisor asks for workers input.	2 (11%)	3 (16%)	8 (42%)	6 (32%)	2.95 (.970)
My supervisor encourages teamwork.	1 (6%)	0 (0%)	9 (53%)	7 (41%)	3.29 (.772)
My supervisor makes good use of workers' knowledge and skills.	2 (11%)	2 (11%)	8 (44%)	6 (33%)	3.00 (.970)
My supervisor gives clear instructions.	2 (11%)	2 (11%)	8 (42%)	7 (37%)	3.05 (.970)
My supervisor gives feedback to workers about their performance.	1 (6%)	3 (17%)	6 (33%)	8 (44%)	3.17 (.924)
My supervisor gives workers control over their daily schedule.	1 (5%)	2 (11%)	11 (58%)	5 (26%)	3.05 (.780)
My supervisor gives workers control over how they do their work.	1 (5%)	4 (21%)	8 (42%)	6 (32%)	3.00 (.882)

Table 27: Facility Two – Supervisor Item Scores, n=19

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
2	0 (0%)	8 (50%)	4 (25%)	1 (6%)	1 (6%)	2 (13%)	**16**[*]

[*] 3 missing, n=19 for facility 2

Table 28: Facility Two – Job Strain Questionnaire Item Scores, n=19

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	1 (5%)	8 (42%)	6 (32%)	4 (21%)	2.68 (.885)
My job takes too much out of me.	1 (5%)	7 (37%)	5 (26%)	6 (32%)	2.84 (.958)
I have to deal with emotionally difficult situations at work.	0 (0%)	5 (26%)	9 (47%)	5 (26%)	3.00 (.745)
The amount of work I am asked to do is fair.	2 (11%)	2 (11%)	13 (68%)	2 (11%)	2.79 (.787)
I have little chance for the advancement I want or deserve	2 (11%)	6 (32%)	6 (32%)	5 (26%)	2.74 (.991)
My job does not use my skills.	5 (26%)	11 (58%)	1 (5%)	2 (11%)	2.00 (.882)
My job is dull and lacks variety.	10 (53%)	5 (26%)	2 (11%)	2 (11%)	1.79 (1.03)
I have limited opportunity for professional or career development at work.	5 (26%)	6 (32%)	2 (11%)	6 (32%)	2.47 (1.22)
My work is challenging and stimulating.	2 (11%)	3 (16%)	8 (42%)	6 (32%)	2.95 (.970)
I have a variety of tasks at work.	1 (5%)	0 (0%)	11 (58%)	7 (37%)	3.26 (.733)
I feel a sense of accomplishment and competence from my job.	2 (11%)	2 (11%)	7 (37%)	8 (42%)	3.11 (.994)
This job fits my interests and skills.	3 (16%)	1 (5%)	9 (47%)	6 (32%)	2.95 (1.03)
I have the opportunity to learn new things at work.	3 (17%)	5 (28%)	8 (44%)	2 (11%)	2.50 (.924)

Table 29: Facility Two – Intent to Turnover Questionnaire Item Scores, n=19

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	2 (11%)	6 (32%)	3 (16%)	8 (42%)	2.89 (1.10)
I often think about quitting.	2 (11%)	10 (53%)	4 (21%)	3 (16%)	2.42 (.902)
I could find a job with another employer with about the same pay and benefits as I have now?	3 (16%)	4 (21%)	5 (26%)	7 (37%)	2.84 (1.12)

Table 30: Facility Two – Job Satisfaction Item Scores, n=19

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	2 (11%)	3 (16%)	5 (26%)	6 (32%)	3 (16%)	3.26 (1.24)

Table 31: Facility Three – Empowerment Questionnaire Item Scores, n=21

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	6 (29%)	0 (0%)	10 (48%)	5 (24%)	2.95 (.740)
I am often involved when changes are planned.	4 (19%)	6 (29%)	7 (33%)	4 (19%)	2.52 (1.03)
I can be creative in finding solutions to problems on the job.	2 (10%)	0 (0%)	12 (57%)	7 (33%)	3.24 (.625)
I am involved in determining organizational goals.	2 (10%)	8 (38%)	6 (29%)	5 (24%)	2.67 (.966)
I am responsible for the results of my decisions.	0 (0%)	1 (5%)	9 (43%)	11 (52%)	3.48 (.602)
My input is solicited in planning changes.	3 (14%)	5 (24%)	9 (43%)	4 (19%)	2.67 (.966)
I take responsibility for what I do.	0 (0%)	1 (5%)	5 (24%)	15 (71%)	3.67 (.577)
I am responsible for the outcomes of my actions.	0 (0%)	0 (0%)	6 (29%)	15 (71%)	3.71 (.463)
I have a lot of autonomy in my job.	2 (10%)	3 (14%)	13 (62%)	3 (14%)	2.81 (.814)
I am personally responsible for the work I do.	0 (0%)	0 (0%)	6 (29%)	15 (71%)	3.71 (.463)
I am involved in decisions that affect me on the job.	2 (10%)	6 (29%)	7 (33%)	6 (29%)	2.81 (.981)
I make my own decisions about how to do my work.	2 (10%)	4 (19%)	11 (52%)	4 (19%)	2.81 (.873)
I am my own boss most of the time.	7 (33%)	10 (48%)	3 (14%)	1 (5%)	1.90 (.831)
I am involved in creating organizational goals for the future.	5 (24%)	5 (24%)	10 (48%)	1 (5%)	2.33 (.913)
My ideas and inputs are valued at work.	0 (0%)	10 (48%)	8 (38%)	3 (14%)	2.67 (.730)

Table 32: Facility Three – Worker-Supervisor Relationships Item Scores, n=21

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	3 (14%)	7 (33%)	7 (33%)	4 (19%)	2.57 (.978)
My supervisor is responsive to workers' ideas and concerns.	1 (5%)	8 (38%)	8 (38%)	4 (19%)	2.71 (.845)
My supervisor asks for workers input.	1 (5%)	10 (48%)	7 (33%)	3 (14%)	2.57 (.811)
My supervisor encourages teamwork.	0 (0%)	4 (19%)	13 (62%)	4 (19%)	3.00 (.632)
My supervisor makes good use of workers' knowledge and skills.	1 (5%)	8 (38%)	8 (38%)	4 (19%)	2.71 (.845)
My supervisor gives clear instructions.	1 (5%)	1 (5%)	13 (62%)	6 (29%)	3.14 (.727)
My supervisor gives feedback to workers about their performance.	2 (10%)	7 (33%)	8 (38%)	4 (19%)	2.67 (.913)
My supervisor gives workers control over their daily schedule.	3 (14%)	12 (57%)	6 (29%)	0 (0%)	2.14 (.655)
My supervisor gives workers control over how they do their work.	2 (10%)	9 (43%)	10 (48%)	0 (0%)	2.38 (.669)

Table 33: Facility Three – Supervisor Item Scores, n=21

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
3	2 (10%)	14 (67%)	0 (0%)	1 (5%)	3 (14%)	1 (5%)	**21**

Table 34: Facility Three – Job Strain Questionnaire Item Scores, n=21

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	1 (5%)	5 (24%)	12 (57%)	3 (14%)	2.81 (.750)
My job takes too much out of me.	1 (5%)	9 (43%)	9 (43%)	2 (10%)	2.57 (.746)
I have to deal with emotionally difficult situations at work.	0 (0%)	4 (19%)	13 (62%)	4 (19%)	3.00 (.632)
The amount of work I am asked to do is fair.	1 (5%)	12 (57%)	8 (38%)	0 (0%)	2.33 (.577)
I have little chance for the advancement I want or deserve	5 (24%)	4 (19%)	9 (43%)	3 (14%)	2.48 (1.03)
My job does not use my skills.	5 (24%)	14 (67%)	2 (10%)	0 (0%)	1.86 (.573)
My job is dull and lacks variety.	5 (25%)	13 (65%)	2 (10%)	0 (0%)	1.85 (.587)
I have limited opportunity for professional or career development at work.	6 (29%)	7 (33%)	8 (38%)	0 (0%)	2.10 (.831)
My work is challenging and stimulating.	1 (5%)	3 (14%)	13 (62%)	4 (19%)	2.95 (.740)
I have a variety of tasks at work.	0 (0%)	4 (19%)	12 (57%)	5 (24%)	3.05 (.669)
I feel a sense of accomplishment and competence from my job.	0 (0%)	2 (10%)	13 (65%)	5 (25%)	3.15 (.587)
This job fits my interests and skills.	0 (0%)	2 (10%)	14 (70%)	4 (20%)	3.10 (.553)
I have the opportunity to learn new things at work.	0 (0%)	8 (38%)	9 (43%)	4 (19%)	2.81 (.750)

Table 35: Facility Three – Intent to Turnover Questionnaire Item Scores, n=21

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	4 (19%)	6 (29%)	10 (48%)	1 (5%)	2.38 (.865)
I often think about quitting.	6 (29%)	5 (24%)	8 (38%)	2 (10%)	2.29 (1.01)
I could find a job with another employer with about the same pay and benefits as I have now?	1 (5%)	2 (10%)	12 (57%)	6 (29%)	3.10 (.768)

Table 36: Facility Three – Job Satisfaction Item Scores, n=21

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	2 (10%)	4 (19%)	3 (14%)	8 (38%)	4 (19%)	3.38 (1.28)

Table 37: Facility Eight – Empowerment Questionnaire Item Scores, n=10

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	2 (20%)	3 (30%)	5 (50%)	0 (0%)	2.30 (.823)
I am often involved when changes are planned.	3 (30%)	6 (60%)	1 (10%)	0 (0%)	1.80 (.632)
I can be creative in finding solutions to problems on the job.	0 (0%)	1 (10%)	7 (70%)	2 (20%)	3.10 (.568)
I am involved in determining organizational goals.	1 (10%)	3 (30%)	5 (50%)	1 (10%)	2.60 (.843)
I am responsible for the results of my decisions.	1 (10%)	1 (10%)	5 (50%)	3 (30%)	3.00 (.943)
My input is solicited in planning changes.	3 (30%)	4 (40%)	3 (30%)	0 (0%)	2.00 (.816)
I take responsibility for what I do.	0 (0%)	0 (0%)	4 (40%)	6 (60%)	3.60 (.516)
I am responsible for the outcomes of my actions.	0 (0%)	0 (0%)	5 (56%)	4 (44%)	3.44 (.527)
I have a lot of autonomy in my job.	1 (10%)	3 (30%)	6 (60%)	0 (0%)	2.50 (.707)
I am personally responsible for the work I do.	0 (0%)	1 (10%)	4 (40%)	5 (50%)	3.40 (.699)
I am involved in decisions that affect me on the job.	1 (10%)	2 (20%)	5 (50%)	2 (20%)	2.80 (.919)
I make my own decisions about how to do my work.	3 (30%)	0 (0%)	5 (50%)	2 (20%)	2.60 (1.17)
I am my own boss most of the time.	5 (50%)	2 (20%)	3 (30%)	0 (0%)	1.80 (.919)
I am involved in creating organizational goals for the future.	2 (20%)	3 (30%)	3 (30%)	2 (20%)	2.50 (1.08)
My ideas and inputs are valued at work.	2 (20%)	6 (60%)	1 (10%)	1 (10%)	2.10 (.876)

Table 38: Facility Eight – Worker-Supervisor Relationships Item Scores, n=10

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	1 (10%)	7 (70%)	1 (10%)	1 (10%)	2.20 (.789)
My supervisor is responsive to workers' ideas and concerns.	3 (30%)	4 (40%)	2 (20%)	1 (10%)	2.10 (.994)
My supervisor asks for workers input.	2 (20%)	3 (30%)	4 (40%)	1 (10%)	2.40 (.966)
My supervisor encourages teamwork.	3 (30%)	1 (10%)	5 (50%)	1 (10%)	2.40 (1.08)
My supervisor makes good use of workers' knowledge and skills.	1 (10%)	6 (60%)	3 (30%)	0 (0%)	2.20 (.632)
My supervisor gives clear instructions.	1 (10%)	1 (10%)	6 (60%)	2 (20%)	2.90 (.843)
My supervisor gives feedback to workers about their performance.	1 (10%)	3 (30%)	5 (50%)	1 (10%)	2.60 (.843)
My supervisor gives workers control over their daily schedule.	3 (30%)	4 (40%)	3 (30%)	0 (0%)	2.00 (.816)
My supervisor gives workers control over how they do their work.	4 (40%)	3 (30%)	3 (30%)	0 (0%)	1.90 (.876)

Table 39: Facility Eight – Supervisor Item Scores, n=10

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
8	0 (0%)	6 (60%)	0 (0%)	0 (0%)	0 (0%)	4 (40%)	**10**

Table 40: Facility Eight – Job Strain Questionnaire Item Scores, n=10

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	0 (0%)	3 (30%)	6 (60%)	1 (10%)	2.80 (.632)
My job takes too much out of me.	1 (10%)	4 (4%)	5 (50%)	0 (0%)	2.40 (.699)
I have to deal with emotionally difficult situations at work.	0 (0%)	2 (20%)	5 (50%)	3 (30%)	3.10 (.738)
The amount of work I am asked to do is fair.	0 (0%)	4 (40%)	5 (50%)	1 (10%)	2.70 (.675)
I have little chance for the advancement I want or deserve	1 (10%)	5 (50%)	3 (30%)	1 (10%)	2.40 (.843)
My job does not use my skills.	2 (20%)	5 (50%)	2 (20%)	1 (10%)	2.20 (.919)
My job is dull and lacks variety.	3 (33%)	4 (44%)	2 (22%)	0 (0%)	1.89 (.782)
I have limited opportunity for professional or career development at work.	4 (40%)	2 (20%)	4 (40%)	0 (0%)	2.00 (.943)
My work is challenging and stimulating.	0 (0%)	2 (20%)	7 (70%)	1 (10%)	2.90 (.568)
I have a variety of tasks at work.	0 (0%)	1 (10%)	7 (70%)	2 (20%)	3.10 (.568)
I feel a sense of accomplishment and competence from my job.	0 (0%)	1 (10%)	6 (60%)	3 (30%)	3.20 (.632)
This job fits my interests and skills.	0 (0%)	3 (30%)	4 (40%)	3 (30%)	3.00 (.816)
I have the opportunity to learn new things at work.	1 (10%)	1 (10%)	4 (40%)	4 (40%)	3.10 (.994)

Table 41: Facility Eight – Intent to Turnover Questionnaire Item Scores, n=10

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	2 (20%)	5 (50%)	0 (0%)	3 (30%)	2.40 (1.17)
I often think about quitting.	2 (20%)	2 (20%)	4 (40%)	2 (20%)	2.60 (1.08)
I could find a job with another employer with about the same pay and benefits as I have now?	0 (0%)	0 (0%)	8 (80%)	2 (20%)	3.20 (.422)

Table 42: Facility Eight – Job Satisfaction Item Scores, n=10

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	0 (0%)	1 (10%)	5 (50%)	3 (30%)	1 (10%)	3.40 (.843)

Table 43: Facility Twelve – Empowerment Questionnaire Item Scores, n=11

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	2 (18%)	1 (9%)	7 (64%)	1 (9%)	2.64 (.924)
I am often involved when changes are planned.	6 (55%)	3 (27%)	2 (18%)	0 (0%)	1.64 (.809)
I can be creative in finding solutions to problems on the job.	3 (27%)	2 (18%)	4 (36%)	2 (18%)	2.45 (1.13)
I am involved in determining organizational goals.	5 (56%)	1 (11%)	3 (33%)	0 (0%)	1.78 (.972)
I am responsible for the results of my decisions.	6 (55%)	2 (18%)	1 (9%)	2 (18%)	1.91 (1.22)
My input is solicited in planning changes.	5 (46%)	3 (27%)	2 (18%)	1 (9%)	1.91 (1.04)
I take responsibility for what I do.	1 (9%)	0 (0%)	7 (64%)	3 (27%)	3.09 (.831)
I am responsible for the outcomes of my actions.	0 (0%)	0 (0%)	8 (80%)	2 (20%)	3.20 (.422)
I have a lot of autonomy in my job.	3 (27%)	1 (9%)	4 (36%)	3 (27%)	2.64 (1.21)
I am personally responsible for the work I do.	1 (9%)	1 (9%)	5 (46%)	4 (36%)	3.09 (.944)
I am involved in decisions that affect me on the job.	1 (11%)	2 (22%)	5 (56%)	1 (11%)	2.67 (.866)
I make my own decisions about how to do my work.	2 (18%)	1 (9%)	6 (55%)	2 (18%)	2.73 (1.01)
I am my own boss most of the time.	3 (30%)	4 (40%)	2 (20%)	1 (10%)	2.10 (.994)
I am involved in creating organizational goals for the future.	6 (60%)	2 (20%)	2 (20%)	0 (0%)	1.60 (.843)
My ideas and inputs are valued at work.	4 (36%)	1 (9%)	6 (55%)	0 (0%)	2.18 (.982)

Table 44: Facility Twelve – Worker-Supervisor Realtionships Item Scores, n=11

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	2 (20%)	1 (10%)	7 (70%)	0 (0%)	2.50 (.850)
My supervisor is responsive to workers' ideas and concerns.	2 (20%)	2 (20%)	6 (60%)	0 (0%)	2.40 (.843)
My supervisor asks for workers input.	4 (40%)	1 (10%)	5 (50%)	0 (0%)	2.10 (.994)
My supervisor encourages teamwork.	3 (27%)	2 (18%)	6 (55%)	0 (0%)	2.27 (.905)
My supervisor makes good use of workers' knowledge and skills.	3 (27%)	4 (36%)	3 (27%)	1 (9%)	2.18 (.982)
My supervisor gives clear instructions.	3 (27%)	3 (27%)	4 (36%)	1 (9%)	2.27 (1.01)
My supervisor gives feedback to workers about their performance.	3 (27%)	2 (18%)	4 (36%)	2 (18%)	2.45 (1.13)
My supervisor gives workers control over their daily schedule.	4 (40%)	1 (10%)	4 (40%)	1 (10%)	2.20 (1.14)
My supervisor gives workers control over how they do their work.	4 (36%)	2 (18%)	4 (36%)	1 (9%)	2.18 (1.08)

Table 45: Facility Twelve – Supervisor Item Scores, n=11

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
12	3 (30%)	4 (40%)	1 (10%)	1 (10%)	1 (10%)	0 (0%)	**10**[*]

[*] 1 missing, n=11 for facility number 12

Table 46: Facility Twelve – Job Strain Questionnaire Item Scores, n=11

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	0 (0%)	0 (0%)	6 (60%)	4 (40%)	3.40 (.516)
My job takes too much out of me.	0 (0%)	2 (18%)	6 (55%)	3 (27%)	3.09 (.701)
I have to deal with emotionally difficult situations at work.	0 (0%)	2 (18%)	6 (55%)	3 (27%)	3.09 (.701)
The amount of work I am asked to do is fair.	2 (18%)	2 (18%)	6 (55%)	1 (9%)	2.55 (.934)
I have little chance for the advancement I want or deserve	1 (9%)	3 (27%)	5 (46%)	2 (18%)	2.73 (.905)
My job does not use my skills.	2 (22%)	3 (33%)	3 (33%)	1 (11%)	2.33 (1.00)
My job is dull and lacks variety.	3 (27%)	6 (55%)	2 (18%)	0 (0%)	1.91 (.701)
I have limited opportunity for professional or career development at work.	1 (9%)	1 (9%)	8 (73%)	1 (9%)	2.82 (.751)
My work is challenging and stimulating.	0 (0%)	3 (27%)	6 (55%)	2 (18%)	2.91 (.701)
I have a variety of tasks at work.	0 (0%)	3 (27%)	4 (36%)	4 (36%)	3.09 (.831)
I feel a sense of accomplishment and competence from my job.	1 (9%)	1 (9%)	8 (73%)	1 (9%)	2.82 (.751)
This job fits my interests and skills.	0 (0%)	3 (27%)	8 (73%)	0 (0%)	2.73 (.467)
I have the opportunity to learn new things at work.	2 (18%)	5 (46%)	4 (36%)	0 (0%)	2.18 (.751)

Table 47: Facility Twelve – Intent to Turnover Questionnaire Item Scores, n=11

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	1 (9%)	4 (36%)	2 (18%)	4 (36%)	2.82 (1.08)
I often think about quitting.	0 (0%)	3 (27%)	5 (46%)	3 (27%)	3.00 (.775)
I could find a job with another employer with about the same pay and benefits as I have now?	2 (18%)	2 (18%)	4 (36%)	3 (27%)	2.73 (1.10)

Table 48: Facility Twelve – Job Satisfaction Item Scores, n=11

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	0 (0%)	8 (80%)	0 (0%)	1 (10%)	1 (10%)	2.50 (1.08)

Table 49: Facility Thirteen – Empowerment Questionnaire Item Scores, n=18

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	2 (12%)	4 (24%)	9 (53%)	2 (12%)	2.65 (.862)
I am often involved when changes are planned.	2 (11%)	5 (28%)	6 (33%)	5 (28%)	2.78 (1.00)
I can be creative in finding solutions to problems on the job.	2 (11%)	2 (11%)	9 (50%)	5 (28%)	2.94 (.938)
I am involved in determining organizational goals.	4 (22%)	6 (33%)	3 (17%)	5 (28%)	2.50 (1.15)
I am responsible for the results of my decisions.	0 (0%)	2 (11%)	9 (50%)	7 (39%)	3.28 (.669)
My input is solicited in planning changes.	2 (12%)	8 (47%)	5 (29%)	2 (12%)	2.41 (.870)
I take responsibility for what I do.	0 (0%)	0 (0%)	6 (33%)	12 (67%)	3.67 (.485)
I am responsible for the outcomes of my actions.	0 (0%)	0 (0%)	6 (33%)	12 (67%)	3.67 (.485)
I have a lot of autonomy in my job.	3 (17%)	2 (11%)	9 (50%)	4 (22%)	2.78 (1.00)
I am personally responsible for the work I do.	0 (0%)	0 (0%)	7 (39%)	11 (61%)	3.61 (.502)
I am involved in decisions that affect me on the job.	1 (6%)	5 (28%)	4 (22%)	8 (44%)	3.06 (.998)
I make my own decisions about how to do my work.	2 (11%)	4 (22%)	8 (44%)	4 (22%)	2.78 (.943)
I am my own boss most of the time.	7 (39%)	7 (39%)	4 (22%)	0 (0%)	1.83 (.786)
I am involved in creating organizational goals for the future.	5 (28%)	5 (28%)	2 (11%)	6 (33%)	2.50 (1.25)
My ideas and inputs are valued at work.	3 (17%)	5 (28%)	5 (28%)	5 (28%)	2.67 (1.09)

Table 50: Facility Thirteen – Worker-Supervisor Relationships Item Scores, n=18

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	2 (11%)	7 (39%)	4 (22%)	5 (28%)	2.67 (1.03)
My supervisor is responsive to workers' ideas and concerns.	1 (6%)	6 (33%)	5 (28%)	6 (33%)	2.89 (.963)
My supervisor asks for workers input.	2 (11%)	6 (33%)	4 (22%)	6 (33%)	2.78 (1.06)
My supervisor encourages teamwork.	0 (0%)	4 (24%)	6 (35%)	7 (41%)	3.18 (.809)
My supervisor makes good use of workers' knowledge and skills.	0 (0%)	6 (33%)	6 (33%)	6 (33%)	3.00 (.840)
My supervisor gives clear instructions.	0 (0%)	5 (28%)	7 (39%)	6 (33%)	3.06 (.802)
My supervisor gives feedback to workers about their performance.	1 (6%)	4 (22%)	8 (44%)	5 (28%)	2.94 (.873)
My supervisor gives workers control over their daily schedule.	1 (6%)	9 (50%)	4 (22%)	4 (22%)	2.61 (.916)
My supervisor gives workers control over how they do their work.	0 (0%)	7 (39%)	8 (44%)	3 (17%)	2.78 (.732)

Table 51: Facility Thirteen – Supervisor Item Scores, n=18

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
13	2 (13%)	6 (38%)	0 (0%0	3 (19%)	4 (25%)	1 (6%)	**16**[*]

[*] 2 missing, n=18 for facility number 13.

Table 52: Facility Thirteen – Job Strain Questionnaire Item Scores, n=18

Job Strain Questionnaire	Strongly Disagree	Disagree	Agree	Strongly Agree	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	2 (11%)	7 (39%)	6 (33%)	3 (17%)	2.56 (.922)
My job takes too much out of me.	1 (6%)	6 (33%)	9 (50%)	2 (11%)	2.67 (.767)
I have to deal with emotionally difficult situations at work.	0 (0%)	3 (17%)	11 (61%)	4 (22%)	3.06 (.639)
The amount of work I am asked to do is fair.	2 (11%)	3 (17%)	12 (67%)	1 (6%)	2.67 (.767)
I have little chance for the advancement I want or deserve	0 (0%)	8 (44%)	8 (44%)	2 (11%)	2.67 (.686)
My job does not use my skills.	3 (17%)	11 (61%)	3 (17%)	1 (6%)	2.11 (.758)
My job is dull and lacks variety.	3 (17%)	12 (67%)	3 (17%)	0 (0%)	2.00 (.594)
I have limited opportunity for professional or career development at work.	1 (6%)	6 (35%)	9 (53%)	1 (6%)	2.59 (.712)
My work is challenging and stimulating.	1 (6%)	3 (17%)	13 (72%)	1 (6%)	2.78 (.647)
I have limited opportunity for professional or career development at work.	1 (6%)	2 (12%)	13 (77%)	1 (6%)	2.82 (.636)
I feel a sense of accomplishment and competence from my job.	0 (0%)	4 (24%)	10 (59%)	3 (18%)	2.94 (.659)
This job fits my interests and skills.	1 (6%)	3 (17%)	10 (56%)	4 (22%)	2.94 (.802)
I have the opportunity to learn new things at work.	1 (6%)	4 (22%)	9 (50%)	4 (22%)	2.89 (.832)

Table 53: Facility Thirteen – Intent to Turnover Questionnaire Item Scores, n=18

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	4 (22%)	9 (50%)	4 (22%)	1 (6%)	2.11 (.832)
I often think about quitting.	3 (17%)	7 (39%)	6 (33%)	2 (11%)	2.39 (.916)
I could find a job with another employer with about the same pay and benefits as I have now?	4 (22%)	5 (28%)	6 (33%)	3 (17%)	2.44 (1.04)

Table 54: Facility Thirteen – Job Satisfaction Item Scores, n=18

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	1 (6%)	3 (17%)	5 (28%)	5 (28%)	4 (22%)	3.44 (1.20)

Table 55: Facility Sixteen – Empowerment Questionnaire Item Scores, n=17

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	0 (0%)	4 (24%)	10 (59%)	3 (18%)	2.94 (.659)
I am often involved when changes are planned.	1 (6%)	6 (35%)	8 (47%)	2 (12%)	2.65 (.786)
I can be creative in finding solutions to problems on the job.	0 (0%)	5 (29%)	9 (53%)	3 (18%)	2.88 (.697)
I am involved in determining organizational goals.	0 (0%)	7 (44%)	9 (56%)	0 (0%)	2.56 (.512)
I am responsible for the results of my decisions.	0 (0%)	3 (18%)	6 (35%)	8 (47%)	3.29 (.772)
My input is solicited in planning changes.	1 (6%)	3 (18%)	11 (65%)	2 (12%)	2.82 (.728)
I take responsibility for what I do.	0 (0%)	0 (0%)	6 (35%)	11 (65%)	3.65 (.493)
I am responsible for the outcomes of my actions.	0 (0%)	0 (0%)	5 (29%)	12 (71%)	3.71 (.470)
I have a lot of autonomy in my job.	0 (0%)	4 (24%)	9 (53%)	4 (24%)	3.00 (.707)
I am personally responsible for the work I do.	0 (0%)	0 (0%)	7 (44%)	9 (56%)	3.56 (.512)
I am involved in decisions that affect me on the job.	0 (0%)	4 (24%)	10 (59%)	3 (18%)	2.94 (.659)
I make my own decisions about how to do my work.	1 (6%)	4 (24%)	11 (65%)	1 (6%)	2.71 (.686)
I am my own boss most of the time.	5 (29%)	6 (35%)	6 (35%)	0 (0%)	2.06 (.827)
I am involved in creating organizational goals for the future.	2 (12%)	6 (35%)	8 (47%)	1 (6%)	2.47 (.800)
My ideas and inputs are valued at work.	0 (0%)	4 (24%)	10 (59%)	3 (18%)	2.94 (.659)

Table 56: Facility Sixteen – Worker-Supervisor Relationships Item Scores, n=17

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	0 (0%)	3 (19%)	7 (44%)	6 (38%)	3.19 (.750)
My supervisor is responsive to workers' ideas and concerns.	0 (0%)	5 (29%)	7 (41%)	5 (29%)	3.00 (.791)
My supervisor asks for workers input.	0 (0%)	2 (12%)	8 (47%)	7 (41%)	3.29 (.686)
My supervisor encourages teamwork.	0 (0%)	1 (6%)	9 (53%)	7 (41%)	3.35 (.606)
My supervisor makes good use of workers' knowledge and skills.	0 (0%)	3 (18%)	8 (47%)	6 (35%)	3.18 (.728)
My supervisor gives clear instructions.	0 (0%)	1 (6%)	9 (53%)	7 (41%)	3.35 (.606)
My supervisor gives feedback to workers about their performance.	0 (0%)	1 (6%)	9 (53%)	7 (41%)	3.35 (.606)
My supervisor gives workers control over their daily schedule.	1 (6%)	3 (18%)	8 (47%)	5 (29%)	3.00 (.866)
My supervisor gives workers control over how they do their work.	1 (6%)	3 (18%)	8 (47%)	5 (29%)	3.00 (.866)

Table 57: Facility Sixteen – Supervisor Item Scores, n=17

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
16	0 (0%)	8 (47%)	2 (12%)	0 (0%)	6 (35%)	1 (6%)	**17**

Table 58: Facility Sixteen – Job Strain Questionnaire Item Scores, n=17

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	0 (0%)	9 (53%)	6 (35%)	2 (12%)	2.59 (.712)
My job takes too much out of me.	0 (0%)	10 (59%)	5 (29%)	2 (12%)	2.53 (.717)
I have to deal with emotionally difficult situations at work.	1 (6%)	6 (38%)	7 (44%)	2 (13%)	2.63 (.806)
The amount of work I am asked to do is fair.	1 (6%)	4 (24%)	12 (71%)	0 (0%)	2.65 (.606)
I have little chance for the advancement I want or deserve	0 (0%)	7 (44%)	5 (31%)	4 (25%)	2.81 (.834)
My job does not use my skills.	4 (24%)	6 (35%)	7 (41%)	0 (0%)	2.18 (.809)
My job is dull and lacks variety.	2 (12%)	12 (71%)	3 (18%)	0 (0%)	2.06 (.556)
I have limited opportunity for professional or career development at work.	2 (12%)	5 (29%)	8 (47%)	2 (12%)	2.59 (.870)
My work is challenging and stimulating.	0 (0%)	5 (29%)	11 (65%)	1 (6%)	2.76 (.562)
I have a variety of tasks at work.	0 (0%)	3 (18%)	12 (71%)	2 (12%)	2.94 (.556)
I feel a sense of accomplishment and competence from my job.	0 (0%)	2 (12%)	13 (77%)	2 (12%)	3.00 (.500)
This job fits my interests and skills.	1 (6%)	2 (12%)	10 (59%)	4 (24%)	3.00 (.791)
I have the opportunity to learn new things at work.	1 (6%)	3 (18%)	8 (47%)	5 (29%)	3.00 (.866)

Table 59: Facility Sixteen – Intent to Turnover Questionnaire Item Scores, n=17

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	3 (19%)	4 (25%)	6 (38%)	3 (19%)	2.56 (1.03)
I often think about quitting.	3 (18%)	8 (47%)	4 (24%)	2 (12%)	2.29 (.920)
I could find a job with another employer with about the same pay and benefits as I have now?	2 (12%)	3 (18%)	10 (59%)	2 (12%)	2.71 (.849)

Table 60: Facility Sixteen – Job Satisfaction Item Scores, n=17

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	0 (0%)	3 (18%)	6 (35%)	8 (47%)	0 (0%)	3.29 (.772)

Table 61: Facility Twenty – Empowerment Questionnaire Item Scores, n=4

Empowerment Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have freedom to decide how to do my job.	1 (25%)	0 (0%)	2 (50%)	1 (25%)	2.75 (1.26)
I am often involved when changes are planned.	1 (25%)	1 (25%)	1 (25%)	1 (25%)	2.50 (1.29)
I can be creative in finding solutions to problems on the job.	1 (25%)	0 (0%)	2 (50%)	1 (25%)	2.75 (1.26)
I am involved in determining organizational goals.	0 (0%)	2 (50%)	1 (25%)	1 (25%)	2.75 (.957)
I am responsible for the results of my decisions.	0 (0%)	1 (25%)	2 (50%)	1 (25%)	3.00 (.816)
My input is solicited in planning changes.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
I take responsibility for what I do.	0 (0%)	0 (0%)	2 (50%)	2 (50%)	3.50 (.577)
I am responsible for the outcomes of my actions.	0 (0%)	1 (25%)	1 (25%)	2 (50%)	3.25 (.957)
I have a lot of autonomy in my job.	0 (0%)	1 (25%)	3 (75%)	0 (0%)	2.75 (.500)
I am personally responsible for the work I do.	0 (0%)	0 (0%)	2 (50%)	2 (50%)	3.50 (.577)
I am involved in decisions that affect me on the job.	0 (0%)	0 (0%)	2 (50%)	2 (50%)	3.50 (.577)
I make my own decisions about how to do my work.	0 (0%)	2 (67%)	1 (33%)	0 (0%)	2.33 (.577)
I am my own boss most of the time.	0 (0%)	4 (100%)	0 (0%)	0 (0%)	2.00 (.000)
I am involved in creating organizational goals for the future.	0 (0%)	2 (50%)	2 (50%)	0 (0%)	2.50 (.577)
My ideas and inputs are valued at work.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)

Table 62: Facility Twenty – Worker-Supervisor Relationships Item Scores, n=4

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
My supervisor treats employees fairly.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
My supervisor is responsive to workers' ideas and concerns.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
My supervisor asks for workers input.	0 (0%)	0 (0%)	4 (100%)	0 (0%)	3.00 (.000)
My supervisor encourages teamwork.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
My supervisor makes good use of workers' knowledge and skills.	0 (0%)	0 (0%)	4 (100%)	0 (0%)	3.00 (.000)
My supervisor gives clear instructions.	0 (0%)	0 (0%)	4 (100%)	0 (0%)	3.00 (.000)
My supervisor gives feedback to workers about their performance.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
My supervisor gives workers control over their daily schedule.	0 (0%)	1 (25%)	3 (75%)	0 (0%)	2.75 (.550)
My supervisor gives workers control over how they do their work.	0 (0%)	1 (25%)	3 (75%)	0 (0%)	2.75 (.500)

Table 63: Facility Twenty – Supervisor Item Scores, n=4

Who do You Consider to be Your Supervisor? Position of Supervisor by Facility ID							
ID	Nursing Home Administrator	Director of Nursing	Assistant Director of Nursing	Charge Nurse	Group of the above	Other	**Total**
20	1 (25%)	2 (50%)	0 (0%)	1 (25%)	0 (0%)	0 (0%)	**4**

Table 64: Facility Twenty – Job Strain Questionnaire Item Scores, n=4

Job Strain Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I have too much to do at work.	1 (25%)	1 (25%)	2 (50%)	0 (0%)	2.25 (.957)
My job takes too much out of me.	1 (25%)	1 (25%)	2 (50%)	0 (0%)	2.25 (.957)
I have to deal with emotionally difficult situations at work.	0 (0%)	1 (25%)	3 (75%)	0 (0%)	2.75 (.500)
The amount of work I am asked to do is fair.	0 (0%)	1 (25%)	2 (50%)	1 (25%)	3.00 (.816)
I have little chance for the advancement I want or deserve	1 (25%)	1 (25%)	2 (50%)	0 (0%)	2.25 (.957)
My job does not use my skills.	2 (50%)	1 (25%)	1 (25%)	0 (0%)	1.75 (.957)
My job is dull and lacks variety.	1 (25%)	3 (75%)	0 (0%)	0 (0%)	1.75 (.500)
I have limited opportunity for professional or career development at work.	1 (25%)	2 (50%)	1 (25%)	0 (0%)	2.00 (.816)
My work is challenging and stimulating.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
I have a variety of tasks at work.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)
I feel a sense of accomplishment and competence from my job.	0 (0%)	0 (0%)	2 (50%)	2 (50%)	3.50 (.577)
This job fits my interests and skills.	0 (0%)	1 (25%)	2 (50%)	1 (25%)	3.00 (.816)
I have the opportunity to learn new things at work.	0 (0%)	0 (0%)	3 (75%)	1 (25%)	3.25 (.500)

Table 65: Facility Twenty – Intent to Turnover Questionnaire Item Scores, n=4

Intent to Turnover Questionnaire	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
I will probably look for a new job in the next year.	1 (25%)	1 (25%)	2 (50%)	0 (0%)	2.25 (.957)
I often think about quitting.	1 (25%)	2 (50%)	1 (25%)	0 (0%)	2.00 (.816)
I could find a job with another employer with about the same pay and benefits as I have now?	1 (25%)	2 (50%)	1 (25%)	0 (0%)	2.75 (1.26)

Table 66: Facility Twenty – Job Satisfaction Item Scores, n=4

Job Satis-faction	**Not at All**	**Somewhat**	**Moderately**	**Very**	**Extremely**	
	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Mean (SD)
Overall, how satisfied are you with you job?	0 (0%)	0 (0%)	2 (50%)	1 (25%)	1 (25%)	3.75 (.957)

Appendix B. CNA Questionnaire Open-Ended Comments

72. How do the programs you participate in affect your work environment? How do the programs you participate in affect your work environment/conditions?

Participants

(Residents) it all has to do with making the lives here feel more like their home. (21)
It offers you a variety of way to make your client life more stimulating. (22)
Better prepared, skills, goals (26)
I feel great (29)
Great – I had tried to apply as best I could. (212)
These programs improve my work environment in a way of I feel more relaxed at work. (214)
Good (215)
It was just orientation (216)
It helped me meet and know my co-workers and it gave me more info about the facility and its owners, and how they like to provide care. (218)
Lifts peoples spirits and put people in good moods. (33)
I get more knowledge and learn new things to help residents. (35)
They encourage you to continue to do a better job (39)
When we have potluck lunches/dinners it strengthens the bond between coworkers because we have time to socialize without the stresses and demands of the job. (311)
Well, they could be done better than that (312)
It makes me feel involved and like I make a difference (801)
They don't, old videos with nothing interesting (803)
Not at all (804)
Helps me deal with different situations (805)
It doesn't directly affect my work now, but when I graduate from nursing school it will greatly affect my work (806)
They don't (1206)
Motivates workers (1310)
I think that it gives motivation to do a better job. (1603)
It doesn't (1609)
No effect (1613)
The programs help most of my coworkers to keep on going at this job. Builds friendships. (1615)
Help me work with open heart knowing I am recognized. (2002)
Meetings help with the residents' care. (2003)
It encourages us to do more. (2005)

Aware/Non-Participants

Gives me some more knowledge (34)
Makes it harder (809)
I think the two programs are good ones but there are not enough. (1602)
OK (1604)
No programs (1606)
I've never been selected EOM after 4 yrs (1610)
I take part and have learning experience. (1614)
Employee morale (1617)

Unaware/Non-Participants

Haven't been in any programs, since there are no programs. (23)
I was not treated fairly. (24)
Very well (25)
It doesn't affect them. Seemingly stays the same work environment. (27)
None. (213)
None (217)
Not one bit. (219)
Don't participate in any programs (37)
The in-services keep up on current on what is expected of us (38)
It reflects my feelings and interest at work (310)
No programs (314)
Working with residents (808)
They don't affect me; I'm not in any (810)
Don't have nothing (1202)
Leadership classes (1302)
We need other programs – we have none at this time (1303)
None at all (1304)
I think that it is unfair sometime, the kind of work I do I don't get treated for; I'm the lowest paid aide here (1306)
I don't participate in any (1307)
Leadership (1308)
If there were programs offered an aide would feel better about the job (1309)
If they had any programs I think you would improve our work ability a lot (1312)
Not applicable to this facility (1322)
No programs offered N/A (1323)
None (1608)
None (2001)

73. How do they increase your job satisfaction? Do they increase your job satisfaction? If so, how?

Participants

By giving us more ideas and ways to do that. (21)
I feel happy when I see my client responding. (22)
Customer service (26)
More patience (29)
Learning to do my duties well with knowledge and competence. (212)
They made me more focus on my work and get to know my residents better. (214)
Excellent (215)
Not much (216)
It really didn't (218)
Yes, because people are happy and having fun. It makes the pay better. (33)
Yes, letting us know how important our job is (35)
Yes, gives you the idea to stop and think if this is really what you want to be doing (39)
Yes, because I don't have to use time to leave the facility for lunch and my stomach is full. (311)
Not really (312)
No (801)
No (803)
No (804)
Yes, I feel like I did something good (805)
Yes, I know my hard work will pay off (806)
No (1206)
Yes, I want to come to work (1310)
No (1609)
You feel like you're doing your job well. (1613)
The programs help most of my coworkers to keep on going at this job. Builds friendship. (1615)
Yes, we get pay raise after job appraisal. (2002)
Not really. (2003)
Yes, by giving us motivation. (2005)

Aware/Non-Participants

Yes (34)
No (809)
No (1602)
Yes (1604)
No programs (1606)
It would increase my commitment with better pay, better and cheaper benefits! (1610)
Yes, they have to improve the job. (1614)

Not particularly (1617)

Unaware/Non-Participants

Very well (25)
Not at all (27)
None. (213)
By being able to be off after 4 days of work. (219)
Don't have any programs, just work (37)
Yes, because if you know what to do, it makes the job safer and easier (38)
No (808)
No (810)
Don't know if you are doing right or not (1202)
Yes, they do (1203)
None (1211)
They communicate with each other (1302)
If we had some programs they would help a lot (1303)
Yes, just by observing everybody in general (1304)
By looking at it as a blessing for helping other, rewarding and learning form the elderly (1305)
No (1306)
No! (1307)
At least they would appreciate my employment (1308)
It would! (1309)
I think it would because people would put more effort in their job (1312)
No (1603)
No (1608)
No (1612)
No (2001)

74. How do they improve you relationship with your supervisor? Do they improve your relationship with your supervisor? If so, how?

Participants

She knows that I can be counted on. (21)
Let's her know that there's a passion within me about my job. (22)
Equal (26)
Listen, learn (29)
By being open and honest. (212)
I feel more trust between my supervisor and me, which make my work more easier and better. (214)
Good communication (215)

Not much (216)
It helped me go to her with my problems, but now we have a new DON. (218)
Yes cuz we can joke around and talk (be friendly) (33)
Yes, encouraging us day by day praising our job (35)
Yes, in better communication (39)
Yes, It's among the CNAs and nurses on the floor, therefore we have time to communicate on a more social level and not so (311)
Sometimes (312)
Yes, having pot luck together (315)
Hope it would but don't think so (801)
None (803)
No (804)
Yes, I can talk to her and she understands (805)
No (806)
Talking, listening to you, I am able to talk to him (1206)
Yes, it makes me think he cares about the workers (1310)
They are proud of me. (1609)
Makes you feel appreciated. (1613)
Yes, they improve our relationship with our supervisors, because we can communicate better and have fun. Trust work in this [...] (1615)
Yes, they encourage us to talk to the management about anything including how supervisors treat you. (2002)
Yes, communicate to one another. (2003)
Yes (2005)

Aware/Non-Participants

Yes, communicate more (34)
No (809)
No (1602)
Yes (1604)
No programs (1606)
We've taken pay cuts and increase in benefit premiums makes me think corporate office is stingy. (1610)
Yes, more explanation. (1614)
Yes, job appreciation. (1617)

Unaware/Non-Participants

Very well (25)
Not at all (27)
None. (213)
ADON takes time to talk to me about my performance. (219)
No (37)
Yes, because you get a sense of how well you are doing (38)

No (808)
No (810)
No (1202)
Some time they do depending on supervisor (1203)
No (1211)
Idea: employee of the month – incentive to do a better job and have a reward, attendance reward – not so many call-ins (1301)
Yes, they communicate with each other. Program each week leadership classes. (1302)
They very well would (1303)
No, more communication among all employees (1304)
Yes, but being cooperative with them, communicating and informing and working together (1305)
No (1306)
No! (1307)
Better communication and respect (1308)
It could! (1309)
Yes, because you would have something to look forward to your supervisor for, if any (1312)
Yes, by having meetings about our concerns and residents' care. (1603)
No (1608)
Sometimes (1612)
No (2001)

75. How do they increase your feelings of control over how you do your job? Do they increase your feelings of control over how you do your job? If so, how?

Participants

I feel comfortable about what I am doing which brings on confidence. (21)
Good. (26)
T.L.C. Tender Loving Care. (29)
Deep-breathing technique. (212)
I feel more confident. (214)
A good appreciation (215)
A little bit (216)
It didn't (218)
ADON lets us know by giving us feedback. (219)
No (33)
Yes, learning new techniques and best way to do things (35)
Don't increase my feelings because I love doing my job! (39)
No (311)
By trying to do everything and everyway I can (312)
I feel of some importance and I make a difference I the residents lives (801)

No (803)
No (804)
Yes, time management and I have fun talking with residents (805)
Yes, I become the boss (806)
Yes, we have in services very often (1310)
No (1603)
Yes, makes me feel good and that I am doing my job good. (1609)
Somewhat. (1615)
Yes (2002)
No (2003)

Aware/Non-Participants

Yes, learning new techniques (34)
No (809)
No (1602)
No (1604)
No programs (1606)
Decrease control. (1610)
I take part and have learning experiences (1614)
No (1617)

Unaware/Non-Participants

Very well (25)
It makes me beware of my job performance. (27)
None. (213)
No (37)
Yes, they give confidence in one's performance (38)
Yes, by having an in service (310)
No (808)
No (810)
No (1202)
Some times it does (1203)
Sometimes (1211)
If you do a good job they nice to you (1302)
Yes, they would (1303)
No (1304)
Yes, self-control and respect for each others feelings and thoughts (1305)
Some times it gets stressful (1306)
Yes! (1307)
Yes, they would help me do more at my work (1308)
Maybe, it would of more healthy and retirement benefits were offered (1309)
I think it would because you would have more to look forward to (1312)
They don't (1321)

No (1608)
No (1611)
Yes (1612)
Yes (2001)

76. How do they decrease any feelings of stress of strain related to your job? Do they decrease any feelings of stress or strain related to your job? If so, how?

Participants

Because I am confident about what I am doing. (21)
Just know that you can touch someone else's life and bring them back to a time they enjoyed. (22)
They don't - stress, overwork, understaffed, cost of living in Austin is very high. (26)
Showing us how much they love us. (29)
Count one to ten and breathe very slowly. (212)
I feel better doing my job and many residents are my friends which makes my job better. (214)
When the resident doesn't cooperate, rude, abusive (215)
None (216)
It didn't (218)
Yes, because people's moods are good and happy (33)
Yes, by teaching us the best way to do things (35)
Yes, because someone else is caring for the residents while we take time to enjoy lunch (311)
It is very stressful work (312)
No (801)
No (804)
No (805)
No (806)
No, we always worry about the residents (1310)
No (1603)
No (1609)
Yes, they decrease any feelings of stress or strain related to my job because, we all can pitch in and work on it. (1615)
No (2002)
Yes, lets CNAs know more info. (2003)
Yes, they understand us. (2005)

Aware/Non-Participants

No (34)
No (809)

No (1602)
Yes (1604)
No Programs (1606)
No, they increase (1610)
Yes, they once did stress management. (1614)
No (1617)

Unaware/Non-Participants

If there were programs CNA's would not be as strained or stressed. (23)
I have more than enough stress when I come to the job. (24)
Very well (25)
None. (213)
They don't (217)
No (37)
Yes, more confidence, less stress (38)
No (808)
N/A (1201)
No (1202)
Sometime, there is time when everything goes as planned (1203)
No (1211)
If you have a lot of things to do at once your feelings and stress pile up (1302)
Probably would (1303)
No (1304)
Yes, when it's too much stress and no communication and of being harassed by coworkers (1305)
Sometimes (1306)
Yes, when you work without someone, that doesn't pull her load (1307)
Yes, more help (1308)
It would (1309)
Probably not but at least you would know that they were at last putting effort on getting programs (1312)
They don't (1321)
No (1608)
No (1611)
Yes (1612)
No (2001)

77. Why do these programs make you want to stay at your current job and not look for another job? Do these programs make you want to stay at your current job and not look for another job? If so, why?

Participants

She show how much the facility cares about their residents. (21)
Some of the things that are done here work and the care that comes behind it is truly genuine. (22)
The patients (patience?) care for them. (26)
So much fun. (29)
It gives me joy to see that my residents are happy and depend on my abilities to do my job. (212)
Because they really recognize hard work and grant you for what you deserve. (214)
I'm qualify with this job. (215)
It does not make any difference whether I stay or not. (216)
They don't (218)
Yes, I like the people I work with and the work I do. (33)
They help me in staying (35)
Yes, because I like my job! (39)
No (311)
No, it does not, but sometimes working short or overworked, makes me think about quit. (312)
Because I try to be as involved as possible (801)
No (803)
No No (804)
No (805)
Yes, job security means a lot to my family and me. (806)
Yes, working with the residents is wonderful. No, it's also very back breaking. (1310)
No (1603)
Yes, I enjoy working here and love my residents (1609)
They are good programs, but money talks (1615)
No (2002)
No (2003)
Yes, we are appreciated. (2005)

Aware/Non-Participants

Yes (34)
No (809)
No (1602)
Yes (1604)
No programs (1606)
There are no programs (1610)

Yes, they increase our knowledge and experience (1614)
No, program is wide spread (1617)

Unaware/Non-Participants

There should be programs; it would help a lot especially when CNAs provide direct care to residents. (23)
Very well (25)
Well, some places don't offer these types of performance. (27)
None. (213)
I like working for Brighton Gardens overall. (219)
I want to stay, because I want to. (37)
No, because they are just basic CNA skills (38)
Yes, because I am interested in this field education wise (310)
No (808)
No (810)
Don't have no programs. (1202)
Sometime depend on how many CNA we working with for the day. (1203)
No (1211)
Yes, because you can to know what people think and feel. (1302)
If we had some, yes, it would. (1303)
No (1304)
No, not going to predict. (1305)
No, it makes me want to get out of this line of work because sometime it can be so unfair. (1306)
Sometimes, yes. (1307)
If they would stop and ask us for our opinions. (1308)
Yes, it would. (1309)
If any programs, I would stay here because I enjoy doing what I do best. (1312)
No, we really don't pay much attention to them. (1601)
No (1608)
Yes (1611)
To much pressure (1612)
No (2001)

78. Tell me about your experience with these programs.

Participants

So far so good. (21)
I don't have very much experience with the programs but I am learning. (22)
Good. (26)
I love it so much, fun, relaxing. (29)

It increases abilities to handle any problems that come around. (212)
I feel part of the family and it feels really good to be useful especially for those who really need it (elderly). (214)
Excellent (215)
It was only an orientation program. (216)
I haven't been with too many programs, except for meetings. (218)
People open up and talk friendly and not stressed (33)
They are very good with information. (35)
Help you to find out what's out there or what is new! (39)
I have a good time, eat good food, and learn some new things about my co-workers. (311)
Well, I know how to do my job. (312)
Circle of Car is a variety of classes that help deal with people. (801)
Long videos and boring times. Goes over some things. Very repetitive. (803)
The theme is good but when management doesn't practice theme, the others do not either. (804)
They help me deal with different people. (805)
I am grateful to find a job that will pay me to work and pay me to expand my knowledge. (806)
None (1206)
Look forward the next program. (1310)
I think that it is good motivation (1603)
It's fun and I enjoy getting to [??] these residents (1609)
Passed around randomly with no fair way of achieving results (1613)
My experience with these programs is that all or more [??] Employees care for your advancement at this job and programs. (1615)
The Sparkles isn't really fair because anyone can get them and only win stupid things. (2003)
You work hard, you rewarded. (2005)

Aware/Non-Participants

In-services are helpful. (34)
Often times other coworkers disagree with who is elected because it's not advertised well. (employee of the month) (1602)
None (1604)
No programs (1606)
I've never been chosen (1610)
Is a very learning experience (1614)
Just voting is not a big thing. (1617)

Unaware/Non-Participants

I have learned a lot and it keeps me on top of things. (25)
I won employee of the month twice. I worked very hard to get it. (27)

None. (213)
Never been in any programs (37)
They keep current on any changes of your skills and new laws (38)
It will help to meet our needs (310)
None (1202)
My experience with the programs helps me to be a better CNA toward my PT. (1203)
We need some programs, but I don't know what kind. (1303)
You learn new things. (1304)
It's my experiences give and encourage someone's to care for others and get in nursing or medical field. (1305)
I work only nights so I don't participate in any programs. (1307)
When benefits are offered an aide feels appreciated. (1309)
I've learned how to have patience with coworkers and supervisors and I've also learned how to enjoy the life I have now. (1312)
OK (1321)
Not very good. (1601)
Don't have any programs (1608)

79. How did the nursing home influence your decision to participate in these programs and your decision that their programs were important to you?

Participants

By explaining everything in detail. (21)
When you see that the programs work with some of the clients you become more interested in how they work. (22)
Administrator. (26)
I'm loving, caring, patient, understanding person. I love people. (29)
Gives me more competency in performing my job. (212)
To share my experience or ideas to anybody. (215)
There are no programs. (216)
I like to see my residents happy and co-workers (33)
They encourage us to participate and explain the importance of enriching ourselves with more knowledge. (35)
They communicate to us to let us know what was going on, and how we can participate. (39)
They did not. (311)
By showing us how important we are, by giving us a lunch every week. (312)
It doesn't. (801)
Pressure us to go. (803)
Mandatory. (804)
Did not influence. (805)
They pay for education. I would remain easily replaceable if not for new skills. (806)

Almost everything we do is with the residents included. (1310)
They didn't (1603)
Yes, they show me how important I am at work. (1609)
Just kind of fell into it, but it's important to continue these programs for future workers and help other connect better themselves. (1615)
By encouraging honest (2002)
They gave me the heart to appreciate what I do. (2005)

Aware/Non-Participants

It's beneficiary for residents and employees. (34)
It didn't. (1602)
No (1604)
No programs (1606)
Educative and they are [??] (1614)
Really didn't (1617)

Unaware/Non-Participants

We were told about them and we could take them. (25)
Well they didn't influence me to participate. (27)
None. (213)
The star level training was a required class. So I had to attend, but they did not make the class enjoyable. (218)
Never offered me any program. (37)
They are mandatory. (38)
Gives me a chance to socialize. (316)
To tell someone how I feel. (808)
Just asked us to do it. (1201)
None (1202)
Because my PT mean a lot to me. (1203)
They were signs on the board. (1302)
No (1303)
It's the patients you care for. (1304)
Because I think that there are some food aides out there and we deserve to be paid for the work that we do. (1306)
None offered so you feel undervalued. (1309)
If they had programs here I think it would influence a lot of people to further their education in the health care field. (1312)
They just put a sign up "go if you want to. (1321)
No (1601)
Don't have any programs (1608)
I work hard everyday to make every day go by and change good [??]. (1611)
No told the time (1612)

80. Are there any programs that you wish the facility would offer? Why would this program help?

Participants

Don't know of any (33)
Not now. (35)
Yes, more CPR classes and LVN programs. (39)
No (311)
Well, it would help if they have employee of the month every month, it would make us feel important. (312)
Employee of the month, awards for attendance and outstanding service. (315)
No (801)
Programs of nurses helping aides our more. Then it would be a team effort. (803)
Higher education – advancement. (804)
Employee of the Month – would make employees have a sense of accomplishment. (805)
No (806)
Programs to advance education and move up job ladder. (1206)
Healthcare would be wonderful. (1310)
I think if they would have employee of the month. Gives you something to look forward to. They have in-service and I like that. (1311)
I think leadership programs should be rotated amongst strong employees. I think that by doing this, care can become stronger. (1603)
No (1609)
Employee-mentoring to improve performance (1613)
None at this time (1615)
Picnics (2002)

Aware/Non-Participants

No (34)
Things are okay. I feel appreciated. I get rewards from how I do my job. I like my job and the way I take care of patients. (321)
Daycare program. Parents would not have to miss work because of a sick child or no babysitter. We wouldn't have to work short-handed. (807)
Awards for attendance or a bonus pay for attendance or outstanding service. (1602)
No (1604)
Any program would help the facility. We don't have any. (1606)
I hope to get more information about r/t patient. Like technical support, so we don't have to waste our time. (1607)
1) Tuition reimbursement!!! 2) Nurse training. All of these would greatly enhance CNA retention at RVC. (1610)
Yes, communication. (1614)

Can't think of any. (1616)
Mentoring program; would give people an inside view. (1617)

Unaware/Non-Participants

Employee of the month, employee picnics, attendance awards, CPR training (31)
CPR training (for emergencies) employee of the month (to make us feel appreciated) (32)
Maybe. (37)
Programs that improve one's skills other than what we already know. More informed. (38)
Employee of the month and good attendance. (314)
No (316)
Attendance, education, raises, motivation, counseling, employee of the month. (318)
People who work overtime if you ask them they should feed them. Then more workers will maybe work more if you ask. Next, babysitting program. (319)
Babysitter programs, offer food to employee that work double-shift, better communication. (320)
No (802)
Help with the decision we make with each other. (808)
Yes, employee of the month and picnics. (810)
Training program about patients. You would learn more about the patient. (1202)
Sometime (1203)
No (1204)
Continuing Ed. Because it would give us a means of being more than a CNA. (1205)
I wish that they would offer how to be a medical aid. (1208)
Physical therapy. (1209)
Insurance. More money, Employee of the month to show appreciation. (1210)
No (1211)
Employee of the month. (1301)
Leadership and CNA meetings. (1302)
I wish we had a medication aide program and LVN program so we could advance in our career not changing jobs. (1303)
Safety procedures. (1304)
None, because it makes us feel like some concern and care what we think of!!! (1305)
Yes, benefits. (1306)
Employee of the month, CNA appreciation week, bonuses if we worked short. (1308)
Health and retirement (1309)
I think if they had programs to further your education in healthcare field I would go for it because with people without any kind of education it's hard to get a good job. (1312)
Retirement. Credit union, 401K, direct deposit (1313)
Aide of the month, nurse's aide day, retirement (1314)
Maybe help the ones that need to get (GED) to go further in the medical field and to advance further in the nursing field. (1315)
I would like for them to offer employee-mentoring, employee of the month or leadership programs. (1322)

Improve communication between direct care and nursing and problem solving. More group studies, communicating with residents and coworkers. Provide information about Alzheimer's disease and medical conditions. (1323)
Support for emotional difficulties – coping with losing residents and residents that are ill. (1605)
No (1608)
No (1611)
Yes (1612)

81. What else could this facility do to improve your work conditions?

Participants

Not sure. (33)
They do really well as they are now. (35)
Hire more CNAs on 11-7. (39)
Better pay, more staff. (311)
By giving us a good raise and be proud of all the extra miles we go. (312)
Have programs as listed on second page. (315)
Appreciate the employees better. (801)
Hire nurses who aren't scared to work and do extra in their days. (803)
Employees would have something to work towards [higher education – advancement]. (804)
Compliment workers, don't overly criticize every time. (805)
Hire supervisor that do not get involved in the cliques! (806)
Give better pay and programs for workers. (1206)
Prepare workers with an exercise program so we could be physically fit to decrease injuries. (1310)
Health insurance – we can't afford it. (1311)
Say "thank you" and "good work you do" (1609)
Hire more experienced and reliable employees. (1613)
Money (1615)
Career development (2002)
They're doing pretty much. (2005)

Aware/Non-Participants

It's good how it is. (34)
Have more teamwork with co-workers. (321)
Offer bonuses. (807)
Offer better pay would [increase???] the turnover rate, shift differentials would probably prevent so many call-ins on night shift. (1602)
People should listen up. (1606)

Other employees too often called sick. So I have to take over their spot. (1607)
PTO, direct deposit, better pay! (free) picnics! More days off! Job well done. (1610)
Have review of pay. I am under paid. After one year some are better paid. (1614)

Unaware/Non-Participants

Award us (31)
Make a better schedule, let us have vacations on the days WE want not the days they pick, pay better (32)
Nothing. (37)
Hire more help! (38)
Good pay. Having some programs such as employee of the month or good attendance of the month. (310)
Better pay. (316)
Staff meeting. (317)
Raises, better pay, not work 40+ hours, free employee meal, more time off. (318)
Hire more CNAs, better pay, better raises, better schedule, more time off! Employee of the month, school programs. (319)
Better pay, better raise, better schedule, employee of the month. (320)
Give us more help. (802)
None (808)
Have staff state their opinions. (810)
Have more help. (1201)
Get enough help and get really aide that will work with you. More supplies. (1202)
UNK (1203)
Pay more and give bonuses. (1204)
Give better pay rate for the work CNAs do because without us the facility does not run. (1205)
Make sure that the place is fully staff and make sure that we have everything that we need. (1208)
Working together. (1209)
Have all equipment I need to do my job. (1210)
Better communication. (1211)
Have team building exercises, in-services, support groups, awards for attendance. (1301)
Communicate with each other. (1302)
Find some kind of insurance that we could afford. (1303)
More training hours and safety procedures. (1304)
Better affordable insurance, different paydays, be off if they fall on the weekends. (1305)
Treat everybody fair. (1306)
Make sure you have a full staff to work with so there would be no problems. (1307)
Better communication. (1308)
Show you that they <u>really</u> care about you and the job you do. (1309)
Listen more to is the CNAs because we are teh ones that work hands-on with residents 24/7. (1312)
Health benefits, accumulated days off. (1313)

Give sick time, sometimes the workers are very sick and they have to come to work because they cannot afford to take off. (1314)
Have more classes. Have medical insurance. (1315)
More structure, more routine so as if not to confuse and cause problems with other co-workers. (1605)
No (1608)
A better pay raise for the worker. (1611)
Nothing (1612)

82. If you don't participate in any programs, do you think the addition of programs such as *employee-mentoring, employee of the month, leadership classes, employee picnics, awards for attendance or awards for outstanding service* would improve your work conditions?

Participants

I do always participate in the programs they offer. (35)
No, because they will not know how the employees feel. (39)
Yes, it will give you a sense of appreciation and they'll be giving back to their employees instead of taking all of your energy and time without thank you. (311)
Well, if they would be proud of us. Then show us by giving us something. (312)
Definitely encourage workers to do more and would enable workers to do more teamwork. (315)
I try to be as involved as possible. (801)
No, it just gives certain people to stand out. (803)
Yes, employees will pull as team. (804)
A little, would make the work morale a bit better. (805)
No, because no one takes these seriously! (806)
Yes. (1206)
I think any programs make to the workers and for the worker is greatly appreciated and it makes it a better working place. (1310)
They should have something like that. I would feel more appreciated. The night supervisor is wonderful. We know what we have to do. She doesn't have to look over our shoulder. More programs that show we are appreciated. (1311)
Yes, because what I know that if you treat your residents good you will have loyal coworkers, recognizing their strengths and weaknesses is a plus for you and your employee. Also, think that a good company should offer things to improve career. In other words I believe that if you prompt growth for your employees your turnover rates would be low. It is a great thing if your company offered school reimbursement. (1603)
Would improve employee performance. (1613)
I think if some of these were worked into our facility, some people would stand out and be noticed. This would (I know for me) be a confidence builder and make others work harder and take some pride in this work. (1615)

Yes, because they will make me more involved, we feel valued and disciplined. (2002)
Yes, because we would learn new things, be competitive. (2003)
Yes, it gives someone the urge to work hard. (2005)

Aware/Non-Participants

Yes, it will help so much because our job is hard and stressful and it will be nice if get recognized more often. (34)
Reward with something so will get motivated. (314)
Yes, I would feel appreciated and it would relieve stress. (321)
Yes, encourage attendance of staff. Encourage family get-togethers. Encourage staff to apply for leadership positions. (807)
No (809)
Yes, I think giving the employees more programs would be beneficial such as picnics, and awards for attendance and outstanding services. (1602)
Yes, we would feel more welcome. (1606)
Employee awards for attendance (gift certificate). (1607)
All of these would greatly enhance CNA retention at RVC. (1610)
Yes, very much needed. (1614)
No, because lots of people don't care. Programs are rigid, it's ridiculous. (1616)
Employee-mentoring, employee picnics, awards for attendance or awards for outstanding service. Better job appreciation. (1617)

Unaware/Non-Participants

Give the employees [something] to look forward to. Make CNAs want to work harder and do a better job. (31)
I think it would make me feel a little bit more appreciated. (32)
Yes, you would feel like they recognized you and your work. (36)
Maybe. (37)
Yes, recognition based on merit. (38)
Giving you a feeling of belonging or something to look forward. (310)
Yes (314)
It encourages me to work more. (316)
Yes, more motivation, encouragement and we would be valued more as employees. (318)
Yes, we would be appreciated more and we would mind working extra days and overtime and we would also be in a better mood and state of mind. Not stressed out!!! (319)
Yes, worker appreciation week. (320)
I don't know. (802)
Yes, it when make you feel need. (808)
Yes, it would encourage me to put more effort in it. (810)
Yes (1201)
It will build up the morale so the employee will come to work with a better outlook. Something to look forward to. (1202)

Don't really know. (1204)
It would give us an incentive and let us know we are appreciated. (1205)
No (1208)
Give you something to look forward for at work. (1209)
Yes, have something to look forward to. (1210)
Could ... learn CPR here. (1211)
Yes, appreciation of a job well done adds to a sense of completion and helps one take pride in work. Sometimes we all forget that we are a team and need to be reminded. (1301)
Yes, employee of the month, leadership classes, CNA picnics. All the programs well help to stay and work hard and better smiles and friendships. (1302)
I would like to be a part of the programs, if we had any. But the programs would give us something to look forward to and give us more good to fulfill. (1303)
Definitely, because we are being thought of and recognized, or acknowledged. (1304)
Yes, because everyone needs an employee mentor. As extended family, employee of the month everyone needs to know they are appreciated. Give credit where credit is due and award when we do something special. (1305)
Yes, because I would want to work better and enjoy my job. (1306)
Yes, it would help us to give our input on how to improve the workloads. So, it could be equal work on everyone and there would be no accidents, we could keep good – help and everyone would be happy and want to come to work. (1307)
We or I would look forward to something. (1308)
Yes, they would, it has worked at other nursing homes to great success!!! (1309)
Yes, because it would give us something to look forward to, and enjoy our job more. (1312)
Yes, I think we as employees will [work] harder and feel more appreciated. (1313)
Very much so, the workers would stay longer. (1314)
I think that they would help. (1601)
Yes, because it makes an employee feel part of a team and want to strive to do the best job possible and be proud to do a good job. (1605)
No (1608)
Yes. (1612)
They need to tell us about them. (2001)

Extra Comments:

Unaware/Non-Participants

There are no programs offered at work. Basically you deal with your own stress and hurry up to do the work. Being a CNA is the hardest job, you deal with family and residents, and it is very under paid. No one wants to hurt their back on any one. (23)
Give us a better pay for what we do! (220)

Appendix C.i - Perception of Empowerment Instrument (PEI)

Provide your reaction to each of the following by putting a number from the scale below in the column to the right of the statement.

5 = Strongly Agree
4 = Agree
3 = Neutral
2 = Disagree
1 = Strongly Disagree

1. I have freedom to decide how to do my job.
2. I am often involved when changes are planned.
3. I can be creative in finding solutions to problems on the job.
4. I am involved in determining organizational goals.
5. I am responsible for the results of my decisions.
6. My input is solicited in planning changes.
7. I take responsibility for what I do.
8. I am responsible for the outcomes of my actions.
9. I have a lot of autonomy in my job.
10. I am personally responsible for the work I do.
11. I am involved in decisions that affect me on the job.
12. I make my own decisions about how to do my work.
13. I am my own boss most of the time.
14. I am involved in creating our vision of the future.
15. My ideas and inputs are valued at work.

Appendix C.ii - Health Care Worker Survey

Your Background

1. In what year were you born?

2. Male _____ Female _____

3. Are you currently
   - □ Married
   - □ Divorced
   - □ Separated
   - □ Widowed
   - □ Never Married
   - □ Member of an Unmarried Cohabiting Couple

4. How many children younger than 18 live in your household?

5. How many of these children are 5 years of age of under?

6. Do you provide care for an elderly/disabled family member (not for pay) Yes___ No ___

7. Which of the following describes your racial background?
   - □ African American or Black
   - □ Asian or Pacific Islander
   - □ Native American
   - □ Causasian or White
   - □ Multi-racial or Bi-racial
   - □ Other

8. Are you of Hispanic, Latino, or Spanish origin? Yes ___ No ___

9. What is the highest level of education you have completed?
   - □ Less than High School
   - □ High School Graduate or GED
   - □ Some College
   - □ College/Professional Degree
   - □ LPN or RN

10. Which best describes your annual total household income (from all sources including a second earner, SSI, child support, retirement income, etc.)?
    - □ Less than $10,000
    - □ $10,000 - $19,999
    - □ $20,000 - $29,999
    - □ $30,000 - $39,999
    - □ $40,000 - $59,999
    - □ Over $60,000

11. What is your home zip code? 4/_/_/_/X

Your Work Experience

12. What was the reason you took a direct care job in the first place? **Check all that apply.**

□ It was the only job available	□ The number of hours
□ The benefits	□ I wanted to work in health care
□ I wanted to help people	□ I had experience taking care of a family member
□ I was not qualified for other types of work	□ Training was available
□ The pay rate	□ The schedule
□ It was close to home	□ I enjoy working with older people
□ I enjoy working directly with people	□ I felt I could do the job well
□ I felt it was my personal calling	□ Other, please explain

13. Are you currently employed as a health care worker directly assisting older or disabled persons?
    - □ Yes - **Skip** to question 17
    - □ No – **Continue** on with question 14

14. How long ago did you leave your last job as a direct care worker? (in months) ___

15. What was the reason you left your last job as a direct care worker? **Check all that apply.**

□ Not enough hours	□ No or inadequate health insurance offered
□ Too many hours	□ Health insurance was too expensive
□ Dissatisfaction with work schedule	□ Not enough training to do the job well
□ Pay was too low	□ Not enough contact with or support from peers
□ Too many patients	□ Family obligations
□ Patients required too much care	□ Lack of child/elder care
□ Dissatisfaction with supervisor	□ No car or had other transportation problems
□ Not valued by the organization	□ Personal health concerns or physical limits
□ Lack of opportunity to advance	□ Distance from home
□ Could not provide quality care	□ You were dismissed
□ Unsafe working conditions	□ Other, Please explain

16. Where are you currently working? Continue on with question 17.
    - □ Another type of health care job, not direct patient care.
    - □ Retail
    - □ Food Service
    - □ Not Working
    - □ Other – Please explain: _____

17. What type of health care setting best describes your current (last) direct care employer?
    - □ Nursing Home
    - □ Home health care agency
    - □ Hospice
    - □ Other – Please explain: _____

18. Are/were you a union member or does/did a union represent you in the direct care job?
    - □ Yes
    - □ No

19. Do/did you have another paid job in addition to your direct care position?
    - □ Yes
    - □ No

20. If so, is/was the other job in health care?
    - □ Yes
    - □ No

21. Are you a Certified Nursing Aide/Assistant (CNA)?
    - □ Yes
    - □ No

22. How far from home is/was your direct care job (in miles)? _____

23. How many hours *on average* do/did you work each week in your direct care job? ____

24. How many *total* hours do/did you work each week (direct care plus any other jobs)? ____

25. What is/was your pay rate per hour for the primary direct care work job? _____

26. Do/did you have health insurance through your direct care work employer?
    - □ Yes
    - □ No – Not offered
    - □ No – Too expensive
    - □ No – Have health insurance from another source

27. For each statement, check the box that *best* describes your immediate supervisor in you current/last direct care job.

True	Mostly True	Mostly False	False	
				Values direct care workers
				Treats employees fairly
				Is responsive to workers' ideas & concerns
				Asks for workers' input
				Encourages teamwork
				Makes good use of workers' knowledge and skills
				Gives clear instructions
				Gives feedback to workers about performance
				Gives workers control over their daily schedule
				Gives workers control over how they do the work

28. How often do/did you experience conflict with other workers in your direct care job?
    - □ Never
    - □ Rarely
    - □ Sometimes
    - □ Usually
    - □ Always

29. On a typical day, how often do/did you have too many demands on your time in your direct care job?
    - □ Never
    - □ Rarely
    - □ Sometimes
    - □ Usually
    - □ Always

30. Overall, how satisfied are/were you with your direct care job?
    - □ Very satisfied
    - □ Satisfied
    - □ Dissatisfied
    - □ Very Dissatisfied

31. What aspects, if any, of your direct care job are/were you dissatisfied with? **Check all that apply.**

□ Not dissatisfied at all	□ Lack of opportunity to advance
□ Not enough hours	□ Not valued by the organization
□ Too many hours	□ Can/could not provide quality care
□ Dissatisfaction with work schedule	□ No or inadequate health insurance offered
□ Pay is/was too low	□ Health insurance is/was too expensive
□ Too many patients	□ Not enough training to do the job well
□ Patients required too much care	□ Not enough contact with or support from peers
□ Dissatisfaction with supervisor	□ Other, Please explain

32. If you hold a direct care job and intent to **leave** it in the next 6 months, why? Check the **most important** reason.

□ Not intending to leave job	□ No care or have other transportation problems
□ Dissatisfaction with job	□ Personal health concerns or physical limits
□ More pay	□ Benefits
□ Lack of child/elder care	□ Other, Please explain

33. If you intend to keep working at your direct care job more than 6 months, why? Check the **most important** reason.

□ It is the only job available	□ I feel valued
□ The pay rate	□ I enjoy personal relationships with the clients
□ The number of hours	□ I like my supervisors
□ A flexible schedule	□ I feel I do the job well
□ The benefits	□ I am not qualified for other types of work
□ It is close to home	□ Other, Please explain

You have completed the survey. Please use the enclosed prepaid addressed envelope to return the survey to MSU. Once again, thank you very much for your generous contribution to improving direct care jobs and care for countless individuals.

Appendix C.iii - Job Role Quality Questionnaire

The 36 items are organized into their respective 11 subscales (5 job concern subscales and 6 job reward subscales).

Job Concern Factors

Instructions: Think about you job right now and indicate on a scale of 1 (not at all) to 4 (extremely), to what extent, if at all, each of the following is of concern.

Overload

1. Having too much to do
2. The job's taking too much out of you
3. Having to deal with emotionally difficult situations

Dead-End Job

1. Having little chance for the advancement you want or deserve
2. The job's not using your skills
3. The job's dullness, monotony, lack of variety
4. Limited opportunity for professional or career development

Hazard Exposure

1. Being exposed to illness or injury
2. The physical conditions on you job (noise, crowding, temperature, etc)
3. The job's being physically strenuous

Poor Supervision

1. Lack of support from your supervisor for what you need to do on your job
2. Your supervisor's lack of competence
3. You supervisor's lack of appreciation for your work
4. Your supervisor's having unrealistic expectations for your work

Discrimination

1. Facing discrimination or harassment because of your race/ethnic background
2. Facing discrimination or harassment because you're a woman

Helping Others

1. Helping others
2. Being needed by others
3. Having an impact on other people's lives

Decision Authority

1. Being able to make decisions in your own
2. Being able to work on your own
3. Having the authority you need to get your job done without having to go to someone else for permission
4. The freedom to decide how you do your work

Challenge

1. Challenging or stimulating work
2. Having a variety of tasks
3. The sense of accomplishment and competence you get from doing you job
4. The job's fitting your interests and skills
5. The opportunity to learn new things

Supervisor Support

1. Your immediate supervisor's respect for your abilities
2. Your supervisor's concern about the welfare of those under him/her
3. Your supervisor's encouragement of your professional development
4. Liking you immediate supervisor

Recognition

1. The recognition you get
2. The appreciation you get

Satisfaction with Salary

1. The income
2. Making good money compared to other people in your field

Appendix C.iv - Role Overload Scale

(The Michigan Organizational Assessment Questionnaire, MOAQ)

Here are some statements about your workload. How much do you agree or disagree with each?

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Agree nor Disagree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

1. I have too much work to do to do everything well.
2. The amount of work I am asked to do is fair.
3. I never seem to have enough time to get everything done.

Appendix C.v - Intent to Turnover

(The Michigan Organizational Assessment Questionnaire, MOAQ)

Survey Items

Here are some statements about you and your job. How much do you agree or disagree with each?

1 = Strongly Disagree
2 = Disagree
3 = Slightly Disagree
4 = Neither Agree nor Disagree
5 = Slightly Agree
6 = Agree
7 = Strongly Agree

1. I will probably look for a new job in the next year.

2. I often think about quitting.

Please answer the following question.

1 = Not at all likely
2 =
3 = Somewhat likely
4 =
5 = Quite likely
6 =
7 = Extremely likely

3. How likely is it that you could find a job with another employer with about the same pay and benefits as you have now?

Appendix C.vi - Job Satisfaction

Single Item Survey

Overall, how satisfied are you with you job?

1 = Not at all
2 = Somewhat
3 = Moderately
4 = Very
5 = Extremely

Appendix D.i - Demographic Questionnaire

1. Are you currently employed as a certified nursing assistant in a full-care nursing facility?
   - □ Yes
   - □ No

2. What is your age as of today? _____

3. Male_____ Female_____

4. Are you currently:
   - □ Married/ Cohabiting
   - □ Separated
   - □ Widowed
   - □ Divorced
   - □ Never married

5. How many children younger than 18 live in your household? _____

6. Which of the following describes your racial background?
   - □ African American or Black
   - □ Native American
   - □ Caucasian or White
   - □ Asian or Pacific Islander
   - □ Other

7. Are you of Hispanic, Latino, or Spanish origin?
   - □ Yes
   - □ No

8. What is the highest level of education you have completed?
   - □ Less than High School
   - □ Some College
   - □ High School Graduate or GED
   - □ College/Professional Degree
   - □ Other _____

9. Which best describes your annual total household income (from all sources including a second earner, SSI, child support, retirement income, etc.)?
   - □ Less than $10,000
   - □ $10,000 - $19,999
   - □ $20,000 - $29,999
   - □ $30,000 - $39,999
   - □ $40,000 - $59,999
   - □ Over $60,000

10. How many hours *on average* do you work each week in your direct care job?

11. What is the reason you took a direct care work job in the first place?
(Check all that apply.)

□ It was the only job available	□ The number of hours
□ The benefits	□ I wanted to work in health care
□ I wanted to help people	□ I had experience taking care of a family member
□ I was not qualified for other types of work	□ Training was available
□ The pay rate	□ The schedule
□ It was close to home	□ I enjoy working with older people
□ I enjoy working directly with people	□ I felt I could do the job well
□ I felt it was my personal calling	□ Other, please explain

12. Do/did you have another paid job in addition to your direct care position?
    - □ Yes
    - □ No

13. If so, is/was the other job in health care?
    - □ Yes
    - □ No

14. How many *total* hours do you work each week (direct care plus any other jobs)?
____

15. What was your pay rate per hour for the primary direct care job? _____

16. Do/did you have health insurance through your direct care work employer?
    - □ Yes
    - □ No – Not offered
    - □ No – Too expensive
    - □ No – Have health insurance from another source

17. In what nursing facility are you currently employed? _____

18. How long have you worked for this facility? _____

19. How long have you worked as a certified nursing assistant? _____

Appendix D.ii - Program Information and Commitment Questionnaire

20. List any programs for employees that are offered where you work. *For example, employee-mentoring programs, employee of the month, leadership classes, employee picnics, awards for attendance or awards for outstanding service*.

21. In which of the programs offered by the facility do you participate?

22. Why did you decide to participate?

23. Why don't you participate in more of the programs?

24. How did you find out about the programs?

25. Was enough information provided?

26. On a scale of 1-10, how much effort did the nursing home put into providing information about these programs, with 1 being no effort and 10 being a lot of effort?

1	2	3	4	5	6	7	8	9	10

27. On a scale of 1-10, how much effort did the nursing home put into convincing you to participate in these programs, with 1 being no effort and 10 being a lot of effort?

1	2	3	4	5	6	7	8	9	10

28. On a scale of 1-10, how much effort did the nursing home put into proving to you that these programs are worthwhile or important, with 1 being no effort and 10 being a lot of effort?

1	2	3	4	5	6	7	8	9	10

29. On a scale of 1-10, how committed are you to these programs (in general), with 1 being not committed at all and 10 being extremely committed? Commitment means being bound emotionally or intellectually to a course of action, sincere interest in a purpose.

1	2	3	4	5	6	7	8	9	10

30. On a scale of 1-10, *if you participate*, how important are these programs to the quality of the work you do each day, with 1 being not important at all and 10 being extremely important?

1	2	3	4	5	6	7	8	9	10

Appendix D.iii – Work Conditions Questionnaires

Empowerment Questionnaire	Strongly Disagree	Disagree	Agree	Strongly Agree
31. I have freedom to decide how to do my job.	**1**	**2**	**3**	**4**
32. I am often involved when changes are planned.	**1**	**2**	**3**	**4**
33. I can be creative in finding solutions to problems on the job.	**1**	**2**	**3**	**4**
34. I am involved in determining organizational goals.	**1**	**2**	**3**	**4**
35. I am responsible for the results of my decisions.	**1**	**2**	**3**	**4**
36. My input is solicited in planning changes.	**1**	**2**	**3**	**4**
37. I take responsibility for what I do.	**1**	**2**	**3**	**4**
38. I am responsible for the outcomes of my actions.	**1**	**2**	**3**	**4**
39. I have a lot of autonomy in my job.	**1**	**2**	**3**	**4**
40. I am personally responsible for the work I do.	**1**	**2**	**3**	**4**
41. I am involved in decisions that affect me on the job.	**1**	**2**	**3**	**4**
42. I make my own decisions about how to do my work.	**1**	**2**	**3**	**4**
43. I am my own boss most of the time.	**1**	**2**	**3**	**4**
44. I am involved in creating organizational goals for the future.	**1**	**2**	**3**	**4**
45. My ideas and inputs are valued at work.	**1**	**2**	**3**	**4**

Worker-Supervisor Relationships: Measure of Reciprocity	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
46. My supervisor treats employees fairly.	**1**	**2**	**3**	**4**
47. My supervisor is responsive to workers' ideas and concerns.	**1**	**2**	**3**	**4**
48. My supervisor asks for workers input.	**1**	**2**	**3**	**4**
49. My supervisor encourages teamwork.	**1**	**2**	**3**	**4**
50. My supervisor makes good use of workers' knowledge and skills.	**1**	**2**	**3**	**4**
51. My supervisor gives clear instructions.	**1**	**2**	**3**	**4**
52. My supervisor gives feedback to workers about their performance.	**1**	**2**	**3**	**4**
53. My supervisor gives workers control over their daily schedule.	**1**	**2**	**3**	**4**
54. My supervisor gives workers control over how they do their work.	**1**	**2**	**3**	**4**

Who do you consider to be your supervisor?

- ☐ Administrator
- ☐ Director of Nursing
- ☐ Other: (please write in) _____

Job Strain Questionnaire	Strongly Disagree	Disagree	Agree	Strongly Agree
Overload				
55. I have too much to do at work.	**1**	**2**	**3**	**4**
56. My job takes too much out of me.	**1**	**2**	**3**	**4**
57. I have to deal with emotionally difficult situations at work.	**1**	**2**	**3**	**4**
58. The amount of work I am asked to do is fair.	**1**	**2**	**3**	**4**
Dead-End Job				
59. I have little chance for the advancement I want or deserve.	**1**	**2**	**3**	**4**
60. My job does not use my skills.	**1**	**2**	**3**	**4**
61. My job is dull and lacks variety.	**1**	**2**	**3**	**4**
62. I have limited opportunity for professional or career development at work.	**1**	**2**	**3**	**4**
Challenge				
63. My work is challenging and stimulating.	**1**	**2**	**3**	**4**
64. I have a variety of tasks at work.	**1**	**2**	**3**	**4**
65. I feel a sense of accomplishment and competence from my job.	**1**	**2**	**3**	**4**
66. This job fits my interests and skills.	**1**	**2**	**3**	**4**
67. I have the opportunity to learn new things at work.	**1**	**2**	**3**	**4**

Intent to Turnover Questionnaire	Strongly Disagree	Disagree	Agree	Strongly Agree
68. I will probably look for a new job in the next year.	**1**	**2**	**3**	**4**
69. I often think about quitting.	**1**	**2**	**3**	**4**
70. I could find a job with another employer with about the same pay and benefits as I have now?	**1**	**2**	**3**	**4**

Job Satisfaction	Not at All	Somewhat	Moderately	Very	Extremely
Overall, how satisfied are you with your job?	**1**	**2**	**3**	**4**	**5**

Appendix D.iv - Open-ended Questionnaire

72. How do the programs you participate in affect you work environment/conditions?

73. Do they increase your job satisfaction? If so, how?

74. Do they improve your relationship with your supervisor? If so, how?

75. Do they increase your feelings of control over how you do your job? If so, how?

76. Do they decrease any feelings of stress or strain related to your job? If so, how?

77. Do these programs make you want to stay at your current job and not look for another job? If so, why?

78. Tell me about your experiences with these programs?

79. How did the nursing home influence your decision to participate in these programs and your decision that these programs were important to you?

80. Are there any programs that you wish the facility would offer? Why would this program help?

81. What else could this facility do to improve your work conditions?

82. If you don't participate in any programs, do you think the addition of programs such as *employee-mentoring programs, employee of the month, leadership classes, employee picnics, awards for attendance or awards for outstanding service* would improve your work conditions? If so, how?

Appendix D.v - Nursing Home Administrator Questionnaire

Program, Award and Incentive List

In the space provided please list the names of any programs, awards, incentives or training you are currently offering for your certified nursing assistants. Examples of programs, awards and incentives are: peer-mentoring programs, leadership-training classes, employee-of-the-month awards, employee picnics, gift certificates for perfect attendance, etc. Feel free to contact me by e-mail if you have any questions at nora.douglas@mindspring.com. Please return this form by **Wednesday, February 9th, 2005**. Thank you for your participation!

I. Name of Nursing Facility:

II. Programs/Awards/Incentives/Training	
#1:	
#2:	
#3:	
#4:	
#5:	
#6:	
#7:	
#8:	
#9:	
#10:	
#11:	
#12:	
#13:	
#14:	
#15:	
#16:	
#17:	
#18:	
#19:	
#20:	

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS QUESTIONNAIRE!

Appendix D.vi - Administrator Follow-Up Interview Questions

1) Briefly describe each program.
2) What are your goals for these programs?
3) How do you advertise these programs? *How do you promote them?*
4) How do you convince employees that these programs are worthwhile?
5) What barriers do you face in implementing these programs? (or other programs)
6) What do you think are the barriers for the CNAs? *Why do you think they do, or don't, participate?*
7) Do you think commitment to programs plays a role in program success? If so, how?
8) Do you evaluate the effectiveness of your programs?
9) Do you have a staff member whose job it is to develop, implement and run employee programs?
10) What do you think is the solution to improving CNA job satisfaction?
11) What is your turnover rate?
12) How many residents do you have?
13) What is your resident/CNA ratio for each shift?
14) How many CNAs do you currently employee?
15) How many CNAs do you have working on each shift?
16) How long have you worked at this facility?

Appendix E.i - Scoring: Demographic Questionnaire

1) Employed: Dichotomous, Yes = 1 No = 0, if no "not eligible"

2) Age: Continuous, "What is you age as of today?"

3) Sex: Dichotomous, Male = 1 Female = 0

4) Marital Status: Categorical

Married/Cohabiting = 1, Divorced = 2, Separated = 3, Widowed = 4, Never Married = 5

5) Dependant Children: Continuous, "How many children younger than 18 live in your household?"

6) Race: Categorical

Black = 1, Asian/Pacific Islander = 2, Native American = 3, White = 4, Other = 9

7) Ethnicity: Dichotomous, Hispanic = 1, non-Hispanic = 0

8) Education: Categorical

Less than High School = 1, High School Graduate or GED = 2, Some College = 3,

College/Professional Degree = 4, Other = 9 Otheduc: open

9) Income: Categorical

Less than $10,000 = 1, $10,000-$19,999 = 2, $20,000-$29,999 = 3, $30,000-$39,999 = 4,

$40,000-$49,999 = 5, $50,000-$59,999 = 6

10) Hours: Continuous, "How many hours *on average* do you work each week in your direct care job?"

11) Reason took direct care job: Dichotomous

16 dummy variables, Yes = 1 No = 0, Other reason: Open

12) Second Job: Dichotomous, Yes = 1, No = 0

13) Second Job Health care: Dichotomous, Yes = 1, No = 0

14) Total Hours: Continuous

"How many *total* hours do you work each week (direct care plus any other jobs)?

15) Pay: Continuous, Recoded into categories or dichotomous variable depending on distribution and natural break

16) Insurance: Categorical

Yes = 1, No, not offered = 2, No, too expensive = 3, No, from another source = 4

Recoded into dichotomous variable Yes = 1, No = 0

17) Place of employment: Categorical, Used to put CNA's into groups by nursing home.

Appendix E.ii - Scoring:
Program Information & Commitment Questionnaire

1) *List any programs for employees that are offered where you work. For example and employee-mentoring program, employee of the month, or leadership classes.*
2) *Which of these programs do you participate in?*

   - **Count number of programs and put into categories.**
   - **Create % participate (#participate/#programs).**

3) *Why did you decide to participate?*

   - **Using contextual analysis, put into categories of reasons.**

4) *Why don't you participate in more of the programs?*

   - **Using contextual analysis, put into categories of reasons not to participate.**

5) *How did you find out about the programs?*

   - **Using contextual analysis, put into categories of ways they got information.**

6) *Was enough information provided?*

   - **Yes = 1, No = 0**

7) *On a scale of 1-10, how much effort did the nursing home put into providing information about these programs, with 1 being no effort and 10 being a lot of effort?*

8) *On a scale of 1-10, how much effort did the nursing home put into convincing you to participate in these programs, with 1 being no effort and 10 being a lot of effort?*

9) *On a scale of 1-10, how much effort did the nursing home put into proving to you that these programs are worthwhile or important, with 1 being no effort and 10 being a lot of effort?*

   - **Total score of 1-10 for each question (7,8, and 9).**

10) *On a scale of 1-10, how committed are you to these programs (in general), with 1 being not committed at all and 10 being extremely committed? Commitment means a state of being bound emotionally or intellectually to a course of action, the trait of sincere and steadfast fixity of purpose.*

11) *On a scale of 1-10, how important are these programs to the quality of the work you do each day, with 1 being not important at all and 10 being extremely important?*

- **Create commitment variable. Take average score for 10 and 11. Total score range from 1-10. 1 = low commitment, 10 = high commitment.**

Appendix E.iii - Scoring: Empowerment Questionnaire

Items are scored from 1 (strongly disagree) to 4 (strongly agree). No option for do not know or undecided have been provided. If the respondent refuses to answer, a response will be coded appropriately.

Scores can be obtained for the total Empowerment Score and for each subscale.

Scale	Number Items	Range of Possible Scores
Autonomy	5	5-20
Participation	6	6-24
Responsibility	4	4-16
Total Scale	15	15-60

Higher scores indicate that the individual has a lower level of empowerment.

Subscales are as follows:

Autonomy: Item numbers 1, 3, 9, 12, 13

Participation: Item numbers 2, 4, 6, 11, 14, 15

Responsibility: Item numbers 5, 7, 8, 10

Appendix E.iv - Scoring:
Worker-Supervisor Relationship (Reciprocity) Questionnaire

Items are scored from 1 (strongly disagree) to 4 (strongly agree). No option for "do not know" or "undecided" have been provided. If the respondent refuses to answer, a response will be coded appropriately.

Scores are obtained for the total Worker-Supervisor Relationship Score.

Scale	Number Items	Range of Possible Scores
Reciprocity	9	9-36

Higher scores indicate that the individual perceives lower levels of reciprocity.

Scoring: Job Strain Questionnaire

Items are scored from 1 (strongly disagree) to 4 (strongly agree). No option for "do not know" or "undecided" have been provided. If the respondent refuses to answer, a response will be coded appropriately.

Scores can be obtained for the total Job Strain Score and for each subscale.

Scale	Number Items	Range of Possible Scores
Overload	4	4-16
Dead-end Job	4	4-16
Challenge	5	5-20
Total Scale	13	13-52

Higher scores indicate that the individual has a higher level of job strain.

Subscales are as follows:

Overload: Item numbers 1-4 (4 is reverse coded)

Dead-end Job: Item numbers 5-8

Challenge: Item numbers 9-13, reversed scored (1=4, 2=3, 3=2, 4=1)

Appendix E.v - Scoring: Intent to Turnover Questionnaire

Items are scored from 1 (strongly disagree) to 4 (strongly agree). No option for "do not know" or "undecided" have been provided. If the respondent refuses to answer, a response will be coded appropriately.

Scores can be obtained for the total Intent to Turnover Score.

Scale	Number Items	Range of Possible Scores
Total Scale	3	3-12

Higher scores indicate that the individual has a lower level of intent to turnover.

Scoring: Job Satisfaction Single Item

Item is scored from 1=not at all, 2=somewhat, 3=moderately, 4=very, 5=extremely. No option for do not know or undecided have been provided. If the respondent refuses to answer, a response will be coded appropriately.

Scoring: Open-ended Questionnaire

Questions will be analyzed using contextual analysis to identify themes and create categories. Specific comments from these questions will also be used to add to quantitative data from the previous three interviews.

Appendix F.i – CNA Consent Forms

SHORT CONSENT FORM: Certified Nursing Assistant IRB PROTOCOL # 2004-07-0101

Title:
Effects of Certified Nursing Assistant Program Commitment on Perceptions of Work Environment in Austin Area Nursing Homes

Conducted By:
Nora E. Douglas, of The University of Texas at Austin, Department of Sociology; (512) 374-0825

Faculty Sponsors:
Norval Glenn, of The University of Texas at Austin, Department of Sociology; (512) 232-6320
Catherine Ross, of The University of Texas at Austin, Department of Sociology; (512) 232-7064

You are being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time by simply telling the researcher.

Purpose:
The purpose of this study is to study the moderating effects of certified nursing assistant retention program commitment on program participation and perceived work environment. The study will include four fifteen-minute telephone interviews with 100 Austin area certified nursing assistants working in skilled care facilities.

If you agree to be in this study, we will ask you to do the following things:
Complete four fifteen-minute telephone interviews consisting of four topics: demographic information, program information and commitment questionnaire, five work environment questionnaires (empowerment, worker-supervisor relationships, job strain, intent to turnover, and job satisfaction), and open-ended questions regarding program participation.

Total estimated time to participate in study is one hour total (four fifteen-minute telephone interviews).

Risks and Benefits of being in the study
No physical or mental health risks are anticipated from your participation in this study.

Compensation:
You will be mailed gift cards equaling approximately $5-$8 dollars to Austin area restaurants.

The **records** of this study will be stored securely and kept private. Authorized persons from The University of Texas at Austin, members of the Institutional Review Board, and (study sponsors, if any) have the legal right to review your research records and will protect the **confidentiality** of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject.

Contacts and Questions:
If you have any questions about the study please ask now. If you have questions later or want additional information, call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page.

If you have questions about your rights as a research participant, please contact Clarke A. Burnham, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects, (512) 232-4383.

Signatures:

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study:

_____

Signature and printed name of person obtaining consent **Date**

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

_____

Printed Name of Subject **Date**

_____

Signature of Subject **Date**

_____

Signature of Principal Investigator **Date**

Appendix F.ii – Nursing Home Administrator Consent Forms

SHORT CONSENT FORM: Nursing Home Administrators IRB PROTOCOL # 2004-07-0101

Title:
Effects of Certified Nursing Assistant Program Commitment on Perceptions of Work Environment in Austin Area Nursing Homes

Conducted By:
Nora E. Douglas, of The University of Texas at Austin, Department of Sociology; (512) 374-0825

Faculty Sponsors:
Norval Glenn, of The University of Texas at Austin, Department of Sociology; (512) 232-6320
Catherine Ross, of The University of Texas at Austin, Department of Sociology; (512) 232-7064

You are being asked to participate in a research study. This form provides you with information about the study. The person in charge of this research will also describe this study to you and answer all of your questions. Please read the information below and ask questions about anything you don't understand before deciding whether or not to take part. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled. You can stop your participation at any time by simply telling the researcher.

Purpose:
The purpose of this study is to study the moderating effects of certified nursing assistant retention program commitment on program participation and perceived work environment. The study will include four fifteen-minute telephone interviews with 100 Austin area certified nursing assistants working in skilled care facilities. The study will also include two questionnaires administered to Nursing Home Administrators: one asking them to identify programs, awards and incentives that they are offering to their certified nursing assistants and one asking them to provide additional information about these programs such as how long the programs have been running, how to they inform employees about the programs, what the goals are of these programs and how successful nursing home administrators perceive these programs to be.

If you agree to be in this study, we will ask you to do the following things:
Complete one questionnaire providing the names of any programs, awards and incentives offered in your facility and another questionnaire including questions such as: How long have these programs been running? How do you inform your employees about these programs? What are the goals of these programs? Are these programs meeting your expectations?

Total estimated time to participate in study is approximately one hour.

Risks and Benefits of being in the study
No physical or mental health risks are anticipated from your participation in this study.

Compensation:
No compensation is provided.

The **records** of this study will be stored securely and kept private. Authorized persons from The University of Texas at Austin, members of the Institutional Review Board, and (study sponsors, if any) have the legal right to review your research records and will protect the **confidentiality** of those records to the extent permitted by law. All publications will exclude any information that will make it possible to identify you as a subject.

Contacts and Questions:
If you have any questions about the study please ask now. If you have questions later or want additional information, call the researchers conducting the study. Their names, phone numbers, and e-mail addresses are at the top of this page.

If you have questions about your rights as a research participant, please contact Clarke A. Burnham, Ph.D., Chair, The University of Texas at Austin Institutional Review Board for the Protection of Human Subjects, (512) 232-4383.

Signatures:

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study:

_____

Signature and printed name of person obtaining consent **Date**

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

_____

Printed Name of Subject **Date**

_____

Signature of Subject **Date**

_____

Signature of Principal Investigator **Date**

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